PHOTO-ERA

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Gloucester the Picturesque

HERBERT B. TURNER

GLOUCESTER has atmosphere, as the art-world puts it, and yearly there congregate at this little New England seaside city hundreds of artists, many of whom have an international reputation.

East Gloucester, directly across the small inner harbor, with its many summer-homes, hotels and boarding-houses, is filled with these artists, as one may easily see at about noon on a summer-day when the by-streets, the fish-wharves, the beaches, the rocks and the moors beyond pour forth streams of them with their canvases and traps bound home for their mid-day meal.

The town is an American art-center during these months, for exhibition follows exhibition at the "Gallery on the Moors," and at the quaint Sargent Murray Gilman Gallery in the city proper—a beautiful example of colonial architecture built in 1768 by an ancestor of the distinguished American painter, John Singer Sargent. Many of the studios scattered about East Gloucester and on the moors above the town are also open to visitors.

The chief subjects that are found in these exhibitions are fishing-boats, wharves, New England fishermen's homes, simple in architecture and set off with old-fashioned flowers; Portuguese, Italian and Yankee longshoremen and fishermen, busy about their everyday-tasks; ship-building, the salt codfish industry, quaint by-ways, old houses, vistas of the city with its masts and spires, the harbor activities, the beaches alive with summer people, the ledges with surf pounding upon them, and the moors clothed in their gorgeous autumn-tints, not to mention the marvelous sunsets and seascapes.

Gloucester is but an hour's journey by train from Boston, or, better still, but a two-hours' drive by automobile by the way of quaint old Salem and the celebrated North Shore Drive that is unequaled in all America for its beautiful seascapes, palatial summer-homes and lovely tree-arched ways.

This city of fishermen lies nearly at the end of Cape Ann, which stretches itself many miles out into the Atlantic. In 1605 Champlain visited the harbor, and named it "Le Beau Port." Captain John Smith again named it "Tragabizanda" in memory of the fair Moslem. In 1623 it was settled by fishermen, and from a fishing-station to a fishing-village it grew, until to-day it ranks as the second fishing-port of America, having a population of nearly twenty-five thousand.

Gloucester is but some twenty minutes' distance by trolley from Rockport on one hand, which lies at the end of Cape Ann, and Annisquam on the other, which lies on the north side of the cape, opposite from Gloucester; whereas Pigeon Cove lies between Rockport and Annisquam.

Rockport is another, but smaller, fishing-port, and has numerous quaint houses, some dating well back in years, whereas the surrounding country is well diversified by cliffs and beaches. The little harbor of the town is very picturesque, and centered about it is a colony of painters.

Annisquam is very attractive with its tree-shaded streets lined with New England houses; but its ocean-front is pretty well built up with summer-homes, which, although costing a good deal of money, do not lend themselves to art-work.

Taking Gloucester as a center, there is more picture-material, quite pleasantly diversified within a five or ten mile radius, than in any other spot on the New England coast. I speak with the knowledge of one who has done the coast from New Brunswick to New York.

Farther afield, yet but a short trolley-trip, are the great Ipswich sand-dunes that the camerist loves so well. The dunes in one place have

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GLOUCESTER HARBOR HERBERT B. TURNER

encroached so upon a lighthouse that only a few feet of its structure rise above the ramparts that they have made about it. Ipswich itself is a rich field for the photographer, with its tree-arched streets, lined with many old houses; a fascinating stone-bridge or two; a winding river, dotted with small boats and in the background the spires of the town. A pleasing composition I have in mind is an ancient house, —once the old home of an ancestor of Ralph Waldo Emerson,—as seen from across the river, with a double arched stone-bridge in the foreground. Salem and Marblehead (two of the quaintest towns in New England) are within twenty-five miles and reached easily by train.

But to return to Gloucester. I must say a word of its summer-colony, for, beginning at East Gloucester, the beaches and the rocky shore are dotted with the homes of the rich and well-to-do, interspersed now and then with a hotel. Not only the shore, but the fascinating moors are similarly dotted with homes typifying America's best seaside architecture. This colony stretches about three miles to Bass Rocks with its fine residences, splendid rocks and bathing-beach, and with but a small break continues several miles on to Rockport.

A better section for a camera-man to select for an outing, it would be hard to imagine, especially if he cares for marine-subjects. You have all here, fishing-craft, large and small; wharves, old and new; beach-scenes; yacht races; now and then warships; rocks, and surf galore after a storm. Then, too, you have tree-arched roads, picturesque by-streets, quaint houses, very old houses, and fishermen of many nationalities.

The folks of Gloucester are so accustomed to artists, that they give courteous permission to wander about the wharves and often upon their craft to those in search of the picturesque.

The city naturally can furnish all the roll-films the camerist can use, as well as some plates and film-packs of the smaller sizes; but his developing had best be done at home, or somewhere else, for there are so many snappers about, that serious work gets scant attention at most photo-finishing establishments.

Mr. French has asked me to speak of my personal experience and equipment. I have spent a good deal of time, off and on, at Pigeon Cove, Rockport and Gloucester, but until this year, outside of stereo. records, have never seriously tried to interpret the spirit of the district by photography.

I prefer East Gloucester as headquarters; and this year I found a delightful, rambling old hotel at the water's edge that has been an artists' haunt for years. A man with a soul had

kept the place and given it a strong European atmosphere that suggested, in a way, such art rendezvous as Siron's at Barbizon, immortalized by Stevenson, and Julia's at Pont Aven in Brittany, in that its walls are covered with mementos of the artists that have congregated there in years past.

The main lounge is mostly hung with water-colors, whereas the cosy smoking-den—with its studio-window framing a delightful seascape—has a frieze made by panels in oil of Gloucester scenes. The walls of the queer, crooked dining-room, below-stairs, that stretches itself along the water-side of this rambling inn, are a museum of colonial and foreign pottery interspersed with other objects of interest. Yes; the Harbor View Inn is quite worth while, and the rates are modest.

I took, as usual, more equipment than was necessary. Any camera, used with proper judgment, will not fail to yield pictures; for picture-material is there, as I have been trying to tell my readers.

I took a 5 x 7 Cycle Graphic in which I use a Smith Series III of 12-inch focal length for soft effects, and a 9⅛-inch Protar. Both came in handy, for soft focus fascinates me when the lens is used at about F/8, whereas the single elements of the Protar, *i.e.*, 13 and 19 inch, were employed on several occasions.

I also had with me a 4 x 5 Speed Graphic fitted with a 7-inch Carl Zeiss Tessar F/4.5. This, perhaps, was the favorite camera, and, as a whole, yielded the larger percentage of pictorial results. Perhaps, I compose better on this scale than on the oblong 5 x 7. What I mean is that, after enlarging from the negatives I liked best, using, as the subject suggested, either a soft lens or a sharp one to enlarge with, I found that the pictures originally produced with the Speed Graphic appealed to me, as a whole, more than the others.

An Ansco Speedex, 2½ x 3¼, with a 3½-inch Goerz Dagor, was also included in the outfit, because there are times and conditions in which a short focal length comes in very handy, such as on shipboard, or getting a view framed by foliage, when great depth is required and the wind is moving things about.

THE LOBSTER-WHARF AT ROCKPORT — HERBERT B. TURNER

I am a great believer in exposure-meters, and have, at one time or another, used English, German and American instruments, but have discarded them all for the Burt meter, two of which I carry—one for between-the-lens shutters, and the other for the focal-plane type. I find them very accurate, also very simple and time-saving.

My favorite speed is 1/25 of a second for the ordinary type of shutter, and 1/40 of a second for a focal plane, stopping down as much as the

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OLD WITCH-HOUSE, NEAR PIGEON COVE — HERBERT B. TURNER

subject and light will allow, although I often work at a half-second or a whole second stopped down to F/32 or F/64, if conditions allow. I rarely use the lens wide open. The Smith I like best at F/9.

Plates, roll-films and film-packs were used on my visit to Gloucester, but I must say I like film-packs the best when away from home, for they are so compact and light. The results are practically the same, and the development, when a tank is used, is simple, quick and accurate.

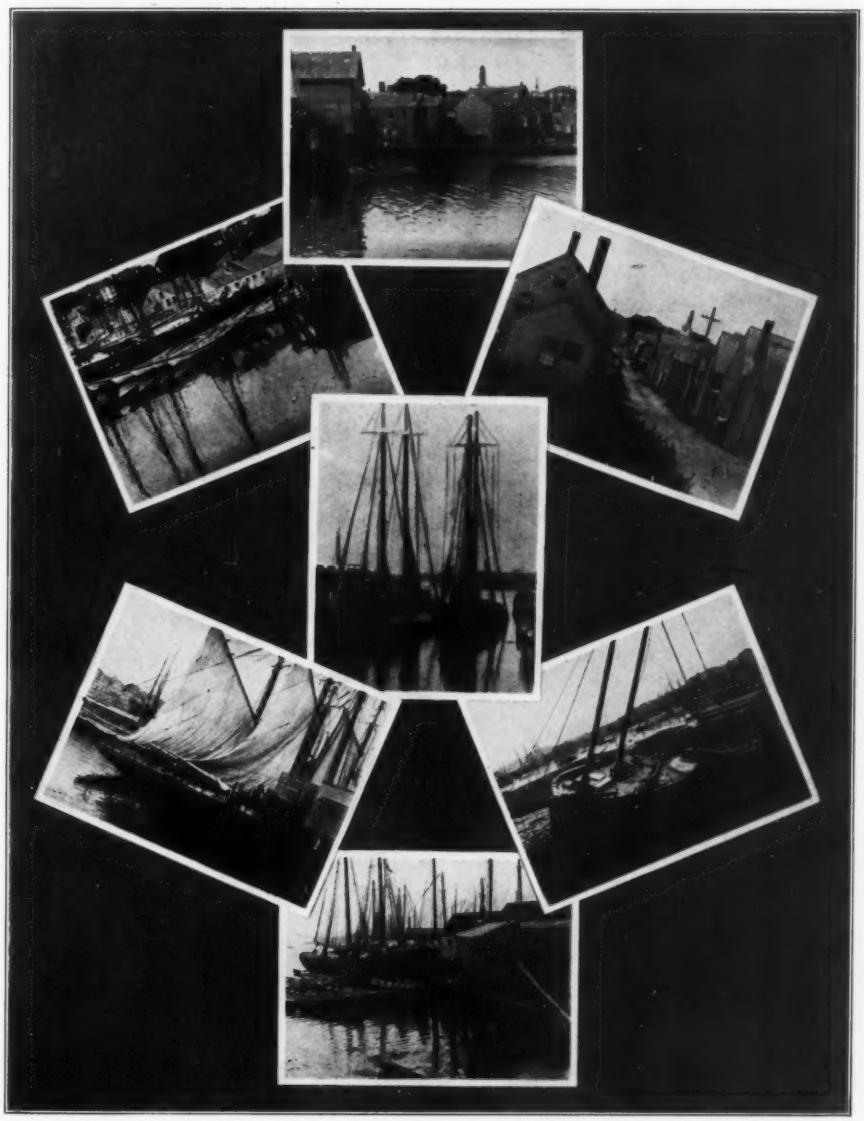
I used a tripod, and consider it essential to good work. A three-times and a fifteen-times filter was included for clouds, but on this visit clouds of the right sort were few and far between; and, when I wanted them on a finished print, I had to put them in with a dab of cotton wet with Farmer's reducer. This is easily done with a weak solution of the reducer, provided you work with the print close to the hypo, and constantly immerse it so as not to let the reducer get away from you. I often use the bleacher in the Eastman Royal Sepia tube instead of making up a solution of Farmer's.

Speaking of paper, I prefer double weight. For contact prints I like Professional Cyko No. 2 (semi-matte), as it gives such a delightful "steel-engraving" effect when developed rightly with M. Q. For enlargements I favor Eastman's Royal Rough Bromide, Rough Artura Carbon Black and Wellington Thick Rough Bromide—all of which serve my needs admirably.

The reproductions from my negatives used in this article were for obvious reasons not printed on rough paper, and to my mind do not have the pictorial quality of the latter.

The mentioning of reducing reminds me that a pleasing result may be attained by making a light print on double-weight Professional Cyko No. 2 from a negative of simple composition, then tracing it in with pencil, adding the proper shading, after which immersing the print in the reducer until the photograph entirely disappears, when you have a neat pencil-sketch on agreeable paper.

Perhaps a word or so may not be amiss with regard to some of the views that accompany this article. My mind goes back pleasantly to the Sunday morning last July that I photographed the Lobster Wharf at Rockport. I had just got my outfit in place when an artist of national reputation paused to watch the process. We began to talk and to suggest to one another different pictorial nooks and corners of the neighborhood. After I had made the exposure, he invited me to an old fishhouse across the way, which he and another artist of note used as



GLOUCESTER AND VICINITY
HERBERT B. TURNER

a studio. The conversation turned to Pigeon Cove and to a very old house there. As a result, I offered to take them over to it in my car for an hour's sketching. Well, I made three or four studies of the delightful old homestead, but I did not learn until a month afterward the story of the place—and then only by chance. I was at the studio of an artist who is a native of Gloucester and he spoke of the Witch House of Lanesville. I asked what house he meant and found it to be the one I admired so highly. The story is that one of the persecuted families of Salem of witchcraft days, fled from that village and built a new home near what is now Pigeon Cove.

"Low Tide" shows particularly well Gloucester Harbor on a soft, hazy morning after a storm when the fishermen hoist their sails to dry.

"Drying Sails," as can be readily seen, is an enlargement from the left-hand side of "Low Tide." It was enlarged through a soft-focus lens on Eastman Royal Bromide paper. The suggestion of a break in the clouds was done with a dab of cotton wet with Farmer's Reducer.

"Gloucester Harbor" is a comprehensive bird's-eye view of the busy little port. I had the luck to be in the town during the fishermen's strike and thus found the greater part of the fleet in port, a rare thing during the summer-months, for then the fleet is usually "off the banks."

The top picture in the full-page group of seven views of Gloucester and vicinity shows the charming old church-tower in the center of Rockport as seen from one of the two harbor-basins. The tower is said to have a British cannon ball still embedded in it, as a souvenir of the day in 1812 when the town was fired upon by a British frigate. The photograph to the right and just below is of a series of fishhouses in Rockport, more than one of which is turned into a studio during the summer-season. The remaining pictures are all from the picturesque and attractive water-front at East Gloucester.

LOW TIDE — HERBERT B. TURNER

One word more before closing: should the reader contemplate a visit of any duration to Gloucester during the summer-season he would do well to secure his accommodations some months in advance; otherwise he may be unable to find what he desires.

THE whole subject of landscape is a world of illusions. The only thing about it that is certainly not an illusion is the effect on the mind of each particular human being who fancies that he sees something, and knows that he feels something, when he stands in the presence of nature.

PHILIP GILBERT HAMERTON.

Improving a Snapshot

WILLIAM S. DAVIS

"A NEGATIVE is only the means to an end," and "Everything which does not contribute to the desired effect is superfluous" are two truisms. Yet, if one stops to analyze the average batch of snapshots, or—for that matter—more carefully planned photographs, it it impossible to get away from the impression that many camerists seem satisfied to accept the results of mechanical processes connected with negative and print-making without exercising any of the methods of control which might oft-times greatly improve the finished work. Even such matters as thoughtful trimming and simple shading of parts of a negative, while printing to improve certain gradations, are usually neglected.

It is, of course, very desirable to obtain as perfect results as possible—technically and pictorially—at the time of making an exposure; but we all know that many times circumstances over which the photographer has no control make it necessary to make a picture as it is found, or not at all, even if all conditions are not ideal. In such instances, it is possible to overcome minor defects and to create a great improvement in the general impression, if the most important features of the composition are satisfactory.

As first-aid to eliminate undesirable subject-matter from an overcrowded composition, it is advisable to cut two L-shaped forms from a sheet of mounting-paper or cardboard, so that when reversed and laid over a print, they form a mat of variable size and shape which can be adjusted quickly to display any part of the material until the most desirable section has been decided upon. Most photographs—hasty snapshots, in particular—contain an excess of subject-matter. This is often due to the employment of lenses which embrace too wide a view-angle for the average class of subjects. Other causes include inability to obtain a nearer standpoint when making the exposure, and uncertainty as to how much material is needed. In hand-camera work, the quick selections a worker is frequently called upon to make, and the smallness of the image in the finder, are also prominent reasons. However, the main point is whether good judgment has been used in selecting the essential material from a satisfactory viewpoint and under suitable lighting. If this has been done, it is easy enough to get rid of superfluous matter by drastic trimming, and resorting to subsequent enlargement of the remaining part of the negative to obtain a picture of presentable size. I have used a section no larger than two ordinary postage-stamps from a 3¼ x 4¼ negative in order to obtain just the composition desired, enlarging this to about 7 x 10 inches for finished prints. The full-page study of "The Woolworth Tower," in the January 1918 issue of PHOTO-ERA, was obtained in this manner, since the viewpoint of this subject, from the water, as made with a lens of ordinary focus, included too much other material.

Having tried the effect of cutting out useless matter, and settled upon just the part of the negative to be used, the worker will next look over the selected part of the subject for such minor defects as can be removed or subdued by various means. These defects are generally of no great size; yet they may intrude painfully upon the consciousness of the observer and mar the harmonious feeling which should be expressed in the finished work. Often a tone-value sufficiently "out" to attract undue attention and lead the eye astray, or an unpleasant detail constitutes the disturbing element.

Unlike general contrast and sharpness of definition, which can be modified to a considerable extent by selecting the proper printing-paper, and using diffusing-mediums, etc., local defects can be removed only by local treatment of some kind, such as retouching the negative—either by handwork or application of chemical solutions—by shading certain parts while printing, by working upon the print, or by a combination of methods. Although all this may sound quite formidable, it is not my intention to convey the idea that a worthless snapshot can be transformed into a pictorial gem by wholesale "faking," but rather that a reasonably good negative can often be made to yield a much better result by exercising a little control here and there, since attention to seemingly small details goes a long way to contribute to the general effect.

As a means to apply some of these general suggestions in a concrete manner, I will now describe in detail the methods employed to transform the snapshot shown in Figure 1 into the more harmonious result presented in Figure 2.

The general tone-quality of the original negative was quite satisfactory, for care was taken to employ a suitable color-sensitive plate, also a ray-filter, to preserve the values between sail and sky. As a result, the defects which later analysis revealed were confined to the intrusion of certain undesirable details, and an excess of subject.

The first point taken up was that of superfluous

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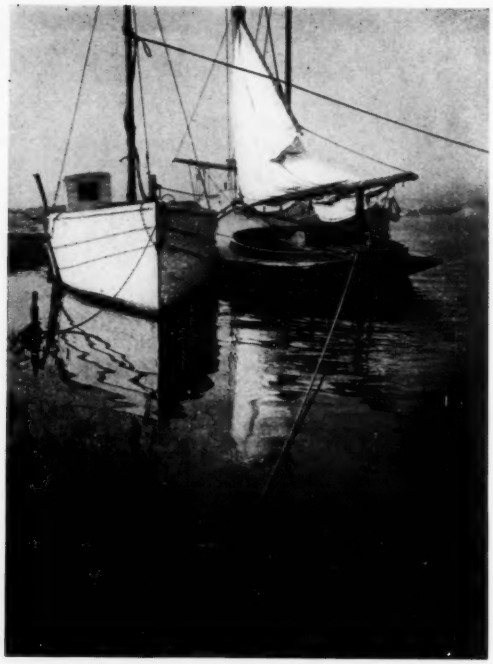


IN REPOSE FIGURE 1 WILLIAM S. DAVIS

subject-matter, and by comparing the finished picture with Figure 1 the reader will see that the material selected finally is limited to a section from the right-hand upper part of the negative, as the boat with the raised sail and the reflections in the water constitute the objective point of the composition. The "power-boat," at the left, was not essential to the picture, or attractive in itself; but, as the craft came together, it could not be eliminated wholly without cutting too much away, so that the trimming was done on a line just to the right of the "power-boat's" bow, and the side retained in shadow to help the balance of the composition. To further concentrate interest upon the sailboat, a part of the foreground-matter was also omitted. However, the most troublesome part of the work still remained to be done, namely, the removal of the dark line showing diagonally across the sky, caused by the rope stretched from the mast of the "power-boat" to a point on shore, and a "stay" from the same mast constituted another undesirable detail. As the picture was now trimmed, there was no apparent reason for either showing. Some uneven dark spots were noticed on the water at the right side of the composition.

Having noted these imperfections, and the fact that they could not be removed satisfactorily by retouching direct upon a negative which would have to stand considerable enlargement—owing to the difficulty of matching the delicate tones and texture of the sky—I simply blocked out the objectionable lines, with red spotting-color, avoiding, however, spreading over more surface than was necessary to cover the edges of the lines perfectly. The next step was to make a good enlargement to $6\frac{1}{2}$ x $8\frac{1}{2}$ of the selected part on smooth paper—either matte or semi-matte giving the best working-surface combined with sufficient freedom of grain for the purpose wanted—taking care to obtain as much detail and gradation as possible in both shadows and highlights. The dark patches of tone in the water were virtually eliminated at this stage of the work by shading the defective parts while exposing the enlargement.

After keeping the finished print under pressure until smooth and flat, it was pinned to a board, and the lines in the sky—which now appeared white—were retouched carefully with a finely pointed hard lead-pencil until a match with the surrounding tones. Since the surfaces of different papers do not take the lead in just the same manner, and the depth of tone to be matched also varies, several leads of different degrees of hardness are needed. 3H or 4H is suitable for producing a light tint, whereas H and HB would be called for in the halftones and shadows. When a smooth tone devoid of definite texture is to be matched in quality very closely, the lead must be hard enough to permit a firm touch without making too dark a tint, for a soft pencil and very light stroke upon a gelatine-film always produces a granular effect. In matching a spot with its surroundings, especially when the tone is light, the pencil should be sharpened to a long and fine point, and the space filled with a series of short, parallel strokes close together. If the tint so produced is not deep enough, the process may be repeated, and only the angle of the strokes changed sufficiently each time to cross-hatch the lines. Stippling is also frequently used when filling in a tint, the pencil in this case being held nearly vertical and a series of dots made by tapping lightly with the point. As a finishing-touch, a tint may sometimes be smoothed out by rubbing the pencil-work very lightly with a

IN REPOSE
FIGURE 2
WILLIAM S. DAVIS

clean bit of chamois-leather, old soft cloth, or a wad of absorbent cotton.

When it is desired to darken a large area of tone in a print, powdered graphite—which can be made in small quantities by rubbing a pencil upon fine sand-paper—may be applied with a cotton- or chamois-pad, going over the surface without regard to small lights, as these can be recovered later by use of a soft rubber-eraser.

As the print now appeared satisfactory, it only remained to obtain a new negative from it by copying with a camera in the ordinary way. Of course care was taken to have the print perfectly flat and at right angles with the lens, and to obtain as much freedom of grain as possible, the print being placed in a rather diffused light some distance from the windows. An ideal lighting is one where an equal amount of illumination comes from each side, as in a room with windows on opposite sides; but the next best is to have the light from one large window some distance away fall upon the print, but at a slight angle to avoid reflecting light back into the lens. At this stage some diffusion of definition can be introduced, if thought desirable, by moving the lens a bit out of the plane of sharp focus.

A plate of moderate speed, such as some makers list as a "Commercial," is much better for copy-work in monochrome than the fast grades used commonly for snapshot and studio-work; but in the present instance I did not happen to have the former at hand, so used a fast orthochromatic plate, giving an exposure of eighteen seconds with the lens stopped to F/16, and to overcome the tendency which fast emulsions display to render an excessively flat image when copying from photographs. The plate was developed in a strong hydrochinon-developer containing a plenty of bromide, the formula being as follows:—

Water	4 ozs.
Sodium sulphite (dried)	60 grs.
Sodium carbonate	90 "
Hydrochinon	20 "
Potass. bromide	2 "

This is a very good developer for copy-work, but the amount of bromide used should be varied according to the character of the plate employed, it being advisable to reduce—or even to omit it entirely—with plates which naturally give a strong image free of fog.

From the new negative, finished prints can be produced without individual manipulation, and although in this case only a 4 x 5 plate was used, it is possible—if one possesses a camera of sufficient size—to make a negative at least as large as the print, thus permitting large finished prints by any process to be produced without resorting, each time, to the use of an enlarger.

The Ethics of Specimen-Prints

THE interest which continues to be manifested in the question of photographers showing as specimens work which they have not personally produced shows that the matter is regarded as an important one, and indicates great faith in the value of a good show of pictures as an aid in attracting business; naturally, therefore, the beginner is desirous to acquire a collection of specimens as soon as, or even before, he has taken down his shutters for the first time.

Undoubtedly the general public regard the prints exhibited by a photographer as genuine specimens of the current work sent out by him, and any departure from this is rightly regarded as more or less fraudulent, whether the specimens have been actually made by him or not, and it may be interesting to consider a few situations that have a general bearing upon the question. In the first place, there is the case of a man who may have been an amateur or an assistant in another studio who purchases a business and continues it on the strength of the previous proprietor's negatives and reputation, merely changing the name or sometimes doing business under the old name to which he is now compelled to add his own as proprietor, although even this need not be done upon the prints, which often are what advertise the studio. Although this is a flagrant case of "bought specimens," we think that few of our professional friends would raise any objection to it, because it concerns an established business, and does not bring a new competitor into the field. It is felt rightly enough that if the old standard is maintained things remain as they were, whereas if the work deteriorates, so much the better for the other photographers in the district. It is certain that a man must stand or fall by the work he sells to his sitters, and that—though a certain amount of chance business may be obtained by the window-display—it is the current work

which effects the steady growth of a business through the recommendation of satisfied patrons.

A somewhat different position is created when an ex-assistant who has legitimately acquired specimens while in employment starts upon his own account. It is well known to all practical men that it is easier to produce good work in a well-lighted studio with perfect apparatus than when handicapped with a more or less unsuitable position and such lenses and cameras as can be cheaply acquired, so that it is quite possible that a lower standard will be attained and the public be disappointed. There are geniuses who can produce good work under the most adverse conditions, but as was shown in the course of a law-case, a few years ago, a change from one studio to another, even in the same street, may play havoc with an established reputation.

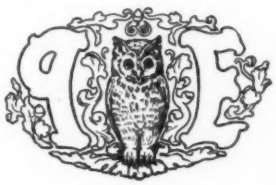
The acquirement of a sufficient stock of specimens is quite a stiff problem for the beginner; but if he or she be not prepared to face it in a straightforward way, it would be better to give up the idea of becoming a photographer at all, as it betrays a lack of skill and confidence in one's own work to shirk it. Every operator has some ideas as to style, and finds it easier to work upon his own lines than to follow those of other people; therefore he should prepare specimens of a style and quality which he can easily reproduce when sitters begin to come in. There are now three principal ways to become a portrait-photographer, the first and most orthodox being to become an assistant or pupil in a successful studio. This should be the best way; but unfortunately many of the most artistic workers are either averse to teaching their methods or are temperamentally unsuited to do so. Hence there is danger of the novice falling into the hands of those who are out for a big premium, and in return put the pupil to any form of drudgery which may pay him best. As an example of what has actually occurred, we may mention a case where a hundred-guinea premium was paid for a two years' term, during nearly the whole of which period the pupil was kept at developing amateurs' films. The prospect of acquiring either specimens or the ability to produce them is in such circumstances a very poor one, and if the victim has the necessary money to start, it is not to be wondered at if he purchases them as he purchases the remainder of his furnishings—without regard to individual ability or ambition.

Another door to the profession is from the ranks of the amateurs, which simply means that in many cases people who are desirous to learn photography find that they have to teach themselves, which, with many trials and tribulations, they have succeeded in doing. Such folk are usually quite honest over the specimen-question, for they are usually so satisfied with their work that they would not dream of supplementing it by the usual thing.

Yet others follow the American plan of studying photography in a school, as others study pharmacy and art. This is an excellent way, as much time is saved by the avoidance of useless experimenting, and after a preliminary period of training in the technique of photography the student can by actual work in the studio acquire confidence in his own powers, and eventually collect a series of portraits and studies which will do him good service when he takes the plunge. There are more photographers in the country who have started in this way than most people imagine.

When we come to enlargements and miniatures, we think all requirements are met if customers are supplied with work equal to the samples exhibited, no matter by whom these are made. In most cases the work done by good commercial firms which specialize in certain lines, is far in advance of anything which the photographer could do on the premises. There is an unfortunate tendency in some quarters to exhibit "first-class finish" work in the window and to supply second-class or even lower grades in fulfilment of orders. This is simply dishonest, and the more so as the price asked would be quite a fair and usual one for the best work.

The British Journal.



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A MISTY MORNING — BEATRICE B. BELL

Cobweb-Photography

BEATRICE B. BELL

PHOTOGRAPHING spiders' webs is an extremely interesting occupation, leading, as it does, to a knowledge of the spider and its habits. Moreover, this particular field taxes one's photographic ingenuity to overcome difficulties. Not long ago, I read in an exhaustive book on spiders that cobwebs could not be photographed successfully out of doors, but that it was necessary to remove indoors the branch or object on which the spider was resting, whereupon, the spider would conveniently set about to weave the desired cobweb. Not having had any personal experience with regard to this last point, I can only assume that it is true; but I do differ with the former statement. There is no doubt that, for scientific purposes, cobwebs that are photographed indoors are more desirable, as then the light-conditions for each picture could be controlled and each exposure would be a duplicate of the preceding one; but as a pictorial study, natural surroundings can never be equaled by artificial backgrounds. Ordinarily, a silky cobweb—either in shadow or in glaring sunlight—is much too fine and intangible to impress itself on the photographic plate and, at the same time, to record the surrounding objects with any semblance to naturalness. Indeed, it is often difficult for the eye to detect the cobweb; for it lacks contrast to its surroundings, and the threads are so extremely fine as to be nearly invisible to the ordinary observer. Fortunately, Nature has not apportioned us all days of sunshine; and to relieve such monotony, she has given us a variety of clouds, rain, wind and fog. And although we photographers may consider anything but sunlight a hindrance to our profession, the unpleasant days may often be blessings in disguise. Undoubtedly each unfavorable day will present some subject unobtainable in any other conditions. And so fog, which is ordinarily just disagreeable, has proved the open sesame to cobweb-

photography. An observation-trip made through the woods and fields on a foggy morning will show nearly every bush and tree and clump of grass to be a cobweb-entanglement. The tiny threads are heavy with moisture—actually sagging with it—and the light reflecting on the moisture magnifies many times the real size of the strands. The cobweb that catches the light

"HOW WONDERFUL ARE THY WORKS" BEATRICE B. BELL

shows in relief against its background, and the recording of each filament on the sensitive plate is no longer a thing of difficulty.

The search of cobwebs will reveal unexpected beauties in a little appreciated phase of life. A spider is instinctively looked upon as a thing to be trodden under foot. We consider it with aversion and even with fear, remembering, no doubt, stories of serious illness and even death due to the bite of a spider. Imagine my amazement —when I read a book by an eminent authority on spiders—to find the statement that the writer knew of no spiders in the United States, unless it might be the large tarantula of the South, whose bite was poisonous; that all reported cases he had investigated had been proved to be without foundation, and, moreover, that a spider is not by nature combative. Moreover, virtually every spider is as eager to get away from man as man is from the spider, and all that a spider wants is to be let alone to live its life as Nature intended. The old saying, "Familiarity breeds contempt," may serve to dispose of most of our bugbears concerning creeping, crawling and flying things. My own particular horror always has been worms of all descriptions—even the humble angleworm. And well do I remember, on my first trout-fishing jaunt, the cold chills that crept down my back at the statement that a good fisherman always baited his own hook. Oh yes, I can string the wriggling, stretchy, slippery things on my hook now as well as anyone; but I must confess that there is no pleasure in it. Some day I am going to buy the best book on worms, and attack my pet aversion.

As this is a dissertation on spiders' webs and

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how to photograph them, I must return to my subject; but let me suggest that the reader learn not only how to find and photograph cobwebs, but that he get a book from the nearest library and read of the habits of spiders. It will make the photographic trips more interesting, and, if he cares for nature-study, he can spend many profitable hours searching for and classifying the many interesting spiders and cobwebs.

A COBWEB-ENTANGLEMENT BEATRICE B. BELL

There are—generally speaking—four types of cobwebs: irregular nets, sheet-webs, funnel-webs, and orb-webs. The first is a maze of threads extending in all directions without definite shape. In the second, the principal part of the web consists of a more or less closely woven sheet in a single plane, with threads extending in all directions in that plane, with no apparent regularity of arrangement. The principal part of a funnel-web is sheet-like in structure, but has a tube extending from one end leading to the retreat of the spider. The orb-web, of which there are many variations, consists of a series of radiating lines of dry and inelastic silk which support a thread of viscid and elastic silk. This last is the type most sought after by photographers, and, although the others may make attractive subjects—particularly the funnel-webs,—none can compare with the orb in beauty and charm.

The building of an orb-web is a wonderful piece of work and well worth a bit of study. The spider first makes the outer supporting framework. The preliminary line is often a sort of bridge between two points difficult of access, as, for instance, two branches separated by a running brook. The spider spins out a long thread which the air-current carries until it touches and adheres to some object, whereupon the spider immediately pulls the line tight and fastens the line where it is standing. The spider then makes other lines by fastening, at some point, a thread which it spins as it walks, holding it clear of the object—on which it is walking—by one of its hind-feet until the desired point is reached, when the line is drawn tight and fastened. As soon as the foundation is finished, the radiating lines are formed. First, by walking around the framework and holding up the line so that it does not become entangled,

MORNING-JEWELS BEATRICE B. BELL

a new line is stretched and fastened that will pass through the center of the orb to be. The spider then goes to the center, fastens a line, walks around and attaches it to some part of the framework, repeating this operation until the radii are finished. The center of the cobweb is strengthened by a network of lines termed the hub; the spider works a little on the hub at the time that it makes the radii. There are three decided forms of hubs. The meshed hub is a series of irregularly shaped meshes, the radii often being pulled out of their direct course. The sheeted hub is a closely woven sheet of silk spun on the network, and the open hub resembles the hub of a wagon-wheel—a firm structure that supports the spokes or radii and has an open space in the center. Immediately outside the hub, the spider makes a few turns of a spiral line—usually from four to ten—thus strengthening the center of the web. The radii are then stayed by a spiral line so that they will remain in place until the main part of the web is finished. Up to this point, all the threads used in the construction of the cobweb—except the attachment-disks, by which the lines are fastened—are dry and inelastic. Now, beginning at the outer margin, the spider makes the main part of the cobweb—all the rest is merely a framework—by stretching upon the radii a viscid and elastic line, fastening it to each radius and continuing to work toward the center. The spiral turns are placed close together. The spiral guy is cut away as the other reaches it, and at each radius, the spider pulls the thread out with its hind-foot, attaches the thread, and then by taking away its foot, the thread contracts to the length of space between the two radii. This leaves the line relaxed so that it can be stretched easily instead of broken by an entangled insect; and, moreover, this ensures the insect being caught in other turns of the viscid spiral, during its struggles. The web is now finished. Some of the orb-weavers rest on the hub and wait for their prey. Should they be disturbed, they rush off at one side to the support of the web, or drop to the ground spinning a drag-line up which they ascend later. Others have above or to one side of the orb a retreat which is connected with the hub by one or more lines. These serve as a means of passage to and from the web; and, by keeping one or more of its feet on this line while in the retreat, the spider can feel any disturbance of

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FROM THE SPIDER'S LOOM BEATRICE B. BELL

the web. In running about on its orb, the spider ordinarily uses the radii as a means of support, avoiding all possible contact with the viscid spiral line; but if the spider is frightened, often, in rushing to its retreat, it touches and brings together several turns of the viscid line and thus leaves a distinct trail. I have found this trail very useful to discover the spider's retreat.

An interesting phenomenon in connection with cobwebs is seen occasionally in fields, usually on still autumn-days, when great spaces are covered with masses of cobwebs. The phenomenon is caused by ballooning or aeronautic spiders—usually very young spiders. Great numbers of these spiders climb to the top of some object, whereupon each spider spins a thread which is carried out by an air-current. The spinning is continued until the friction of the air on the silk is sufficient to buoy up the spider which then lets go its hold and is carried off by the wind. Sometimes these ballooning-spiders are carried a long distance. At other times, the wind is too strong, and the threads are blown against some nearby object, occasionally covering large fields with a gauze of silk.

In common with all branches of photography, cobwebs offer their own particular difficulties. The greatest care must be exercised in the choice of a background or, perhaps, I should say, in the selection of a cobweb with a suitable background. Distracting elements, such as twigs which have no relation to the subject, may be removed. Conspicuous lights and shadows which offer contrasts that tend to draw the eye away from the web must be avoided. Sometimes, objects which are considerably in the background and out of focus appear as the brightest spots in the picture, due to the fact that the time of exposure lessens as distance of the subject from the lens increases. This fact is commonly noted in the case of open landscapes which require less exposure than foreground-studies. In order to give the cobweb sufficient contrast so that it will stand out against its surroundings, it must be shown against a dark-toned background, such as the ground or heavy-foliaged bushes or trees. Should it appear against the sky, the inevitable sky-overexposure would obliterate the web. And in order that the greatest amount of light should be reflected from the tiny strands of the web, the exposure must be made against the light. This brings up one of the most serious difficulties that the worker has to contend with, namely, transparent circles tending to opaque circles which often appear on the film and show on the print as white spots. These are caused by the reflection of light on drops of moisture on nearby objects. As they are not often noticed by the eye, they cannot be entirely avoided on the film. The only remedy is after-

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manipulation of the film; or, if the worker is not an adept in this special work, these defects can be removed, to a considerable extent, by spotting on the print. This takes practice and patience; and, if the worker does not meet with success, I would suggest that he try a different paper-surface. Although I prefer a smooth surface for my cobweb-pictures, as it better brings out the delicate detail, I find that occasionally a semi-rough surface will stand the spotting better. Unless the defects are too glaring, I let them alone, as I find that the eye of the observer is sufficiently arrested by the beauty of the cobweb and does not wander about to any great extent.

With regard to equipment, a reflecting-camera is the most convenient, as the effect of the surroundings on the desired picture is so easily examined; but any camera will answer for this work. Indeed, my first cobweb-picture was made with a No. 4 Cartridge Kodak and a portrait-attachment. I never use a soft-focus lens for this work, as the fine detail would be lost. Nor have I found it necessary to use a color-screen although there might be occasions when it would be useful. The focusing must be sharp on the cobweb, and the lens should be stopped down to obtain whatever degree of detail in the distance is preferred by the photographer. Usually, I use my lens at full opening, as the blurring of the background serves to emphasize the strands of the web. And I work as close to the subject as possible, being sure to include in the picture the support of the web.

A very dull and foggy morning is not so much to be desired for cobweb-pictures as a brighter one. After a night of fog, the sky lightens and the mists thin out and then the light will give brighter results. The moment that the sun appears is the time of day that will give the greatest contrast. But remember that the brighter the light, the brighter also are those reflecting drops of water. Here is where the background is most important. Should there be no objects close to the cobweb, there probably would be no dewdrops. A background may sometimes be improvised by placing a dark cloth behind and out of focus of the web. This would do away with most of the white spots; but the surroundings might not appear natural. The cloth could be fastened on sticks or tree-branches or held by someone provided that the photographer is fortunate to find a person willing to accompany him on these wet-morning expeditions.

There is seldom much wind to contend with, as wind and fog are not friends; and, if a wind does appear, the fog disappears swiftly. Should a breeze spring up, the exposure should be made during a lull, if possible, as the slightest motion is likely to result in the blurring of the web in the picture. After the fog has lifted and the sun is shining, the cobwebs soon dry and lose their glistening picture-making qualities, and the photographer must wait until he is blessed with another foggy morning.

Outdoor-photography in any of its forms leads the worker into an understanding of Nature; whether it be the seasons, the varying moods of weather, tree- or plant-life, or the habits of animate beings. The longer we study at the great seat of knowledge, the more are we amazed at the richness of our experiences. Indeed, "How Wonderful are Thy Works."

THERE was a chance in the Sunday supplements, the other day, to compare the prize-works of some of the best of our painters with the photographs from life in the streets, at the wharves, and on the beach, made by those humble members of the journalistic profession who carry their cameras about with them as a private soldier does his knapsack or a pedler his pack. Any artist worthy of the name, any painter who rates truth, the whole truth, above all effectism and style, is fain to admit that, in these newspaper-reproductions, the artist of the street surpasses the artist of the studio in their respective samples—at least as presented without the colors of the paintings. It is a fair test as regards drawing and composition, light and shade, and what the artists call "values"—borrowing and mistranslating a French technical term. Deprived of the witchery and charm of colors and tones, blended or contrasted subtly enough to veil defects in the drawing of details, and with this contrived obscurity of the painter showing up flagrantly, indeed, in ragged edges and passages and pools of meaningless blacks—the depicter of the life of the town for the newspaper simply walks away with the prize from the very prize-winners themselves.

For downright humanness, utter absence of posing and consciousness, in single figures, for spontaneousness, inevitableness, absence of arranged grouping in crowds and their movements, the lightning-pencil of the sun working in the bare instant between the opening and closing of the pneumatic shutter—drawing and shading all the figures, and the spaces between them at one stroke, has of course, no rival worth mentioning in any human hand or brain that ever existed or ever may exist.

The Listener (E. H. CLEMENT).

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The Ship Mayflower

WILFRED A. FRENCH

PURSUANT to the plan of this magazine to contribute its modest share towards the approaching celebration of the Landing of the Pilgrims, PHOTO-ERA published in the September issue a preliminary account of the departure of the Mayflower from Plymouth, England, September 6, 1620, her temporary stay at Provincetown and her final arrival at Plymouth, Massachusetts. This slight diversion, while not photographic in the strictest sense—except so far as it related to Mr. Mortimer's remarkable, historical photograph—gained for PHOTO-ERA appreciation and praise from subscribers and the newspaper-press. In the current issue, PHOTO-ERA presents a photograph of a reproduction of the famous craft together with the history and a complete description of the original ship, so far as it has been possible to procure these important data.

Before proceeding to this interesting topic, however, let me refer briefly to the preparatory arrangements that are being made by the people of Provincetown, where the Pilgrims of the Mayflower made their first landing. Provincetown and all the towns that comprised the historic old colony will commemorate the great event. It is stated that this celebration will in no way interfere with the one which the Pilgrim Tercentenary Commission is planning at Plymouth, twenty-five miles from Provincetown, across Cape Cod Bay, but permit each community to express in its own way, by pageant or otherwise, its own particular version of the Pilgrim story. Only in this manner, it is believed, can the full story be told and local civic pride be adequately recognized, for each Pilgrim settlement has its own traditions, which form the warp and woof of each community-spirit. Although the entire Cape will celebrate the tercentenary, the principal demonstrations will be held at Provincetown where the Pilgrims first landed, November 11, (Old Style), and at Plymouth, December 21, which spot was selected as the permanent settlement. Although the plans are only tentative, at present, it has been proposed to hold the Provincetown celebration first; for according to history, the landing at Provincetown occurred thirty-five days before the settlement at Plymouth. The other local celebrations will follow and close with the one at Plymouth. In view of the fact that the actual anniversaries will occur between November 21, the day on which the Mayflower first cast anchor in Provincetown harbor, and December 26, on which day the final settlement was made, at Plymouth, the pageants—on account of the inclemency of the weather at that season of the year—will be held in the summer-time. Commemorative exercises will mark the various anniversaries as they occur. Camerists who intend to photograph these historic pageants, should make their arrangements as early as possible.

Provincetown has already one important monument, viz., the lofty embattled tower dedicated in 1910, but which, being merely an exact copy of the tower of the Palazzo Pubblico, at Siena, Italy—made familiar to New Englanders by numerous similar towers in Boston, Worcester, Springfield and elsewhere—has aroused much adverse criticism. Therefore, the need is felt of a monument distinctly American in design or, at least, suggestive of the early history of the Pilgrims, particularly of their place of refuge—Leyden, Holland, which city has towers and spires that could well have served as models for a suitable monument, rather than the present and strangely incongruous facsimile of a military structure in Italy. Happily, a project is under way to erect a suitable memorial of the tercentenary, to be celebrated next year, and, as the memorial is to assume a national character, the national, as well as the state, government has appropriated $40,000 toward its cost.

The full-rigged model of the Mayflower, in the Smithsonian Institution, Washington, D.C., is the only one in existence, so far as I know. The following description of the model has been courteously furnished by the secretary of the Smithsonian Institution.

Rigged model: Scale, ½-inch to 1 foot. England, 1620. A wooden, caravel-built, keel vessel, with full bluff bow, strongly raking below waterline; raking curved stem; large open head; long, round (nearly log-shaped) bottom; tumble-in top side; short run; very large and high square stern; quarter galleries; high forecastle, square on forward end, with open rails on each side; open bulwarks to main and quarter decks; a succession of three quarter decks or poops, the after one being nearly 9 feet above main deck; two boats stowed on deck; ship-rigged, with pole-masts; without jibs; square spritsail (or water-sail) under bowsprit; two square sails on fore and main masts, and lateen sail on mizzenmast.

Dimensions of vessel: Length, over all, knightheads to taffrail, 82 feet; beam, 22 feet; depth, 14 feet; tonnage, 120; bowsprit, outboard, 40

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MODEL OF THE MAYFLOWER

Courtesy of the United States National Museum

feet 6 inches; spritsail-yard, 34 feet 6 inches; foremast, main deck to top, 39 feet; total length, main deck to truck, 67 feet 6 inches; foreyard, 47 feet 6 inches; foretopsail-yard, 34 feet 1½ inches; mainmast, deck to top, 46 feet; total, deck to truck, 81 feet; main yard, 53 feet; maintopsail yard, 38 feet 6 inches; mizzenmast, deck to top, 34 feet; total, deck to truck, 60 feet 6 inches; spanker-yard, 54 feet 6 inches; boats, one on port-side of deck, 17 feet long by 5 feet 2 inches wide; one on starboard-side, 13 feet 6 inches long by 4 feet 9 inches wide.

This model was made under the personal supervision of Capt. J. W. Collins. It is an exact miniature, in hull and rig, of a ship of the date and size of the Mayflower. Careful attention was given to its construction, in all details; it was built from the lines and rigged from the sail-plan of a ship cotemporaneous with the Mayflower, and, it may fairly be assumed, represents such a ship as brought the Pilgrims from Plymouth, England, to the New England coast.

The Pilgrims' Mayflower, of 1620, was at one time an English war-ship. The name is one of the oldest ship names in the English navy, going back to 1415, when a vessel with that name carried some of the knights who fought at Agincourt across the channel. Her successor—the Mayflower of 1447—was the flagship of Richard, Duke of Gloucester. But the Mayflower of 1620 was an old Armada veteran long before she came across the Atlantic, and took a prominent part in that historic sea-fight in 1588, fighting alongside of Drake's "Revenge," and Hawkins' "Victory." In the fight off Gravelines, when the Armada made a last desperate attempt to save itself from utter rout, the Mayflower's part was a prominent one. According to a recent writer in the *London Graphic*, the ship was one of the chief ones contributed to Queen Elizabeth's fleet by the merchants of the City of London, but Goodwin's "Pilgrim Republic" states that the officials of Lynn offered the Mayflower (150 tons) to join the fleet against the dreaded Spanish Armada. *The Graphic* erroneously implies that the Mayflower ended her days ingloriously in the slave-trade between Guinea and America. Goodwin, in reference to this rumor, says that the slaver Mayflower was a ship of 350 tons, whereas the Pilgrim vessel was only 150. The latter came to Salem in 1629, and the last known of her was when she was one of a fleet that landed John Winthrop and his colonists at Charlestown in 1630. The most authentic information fixes the tonnage of the Pilgrims' Mayflower at 120 tons.

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The Secret of Beautiful Photography

WARD MUIR

MY contention is that photography deals with facts. A beautiful photograph is produced by pointing the camera at a beautiful fact. There are such a lot of beautiful facts in the world that it is unnecessary to photograph facts which are not beautiful and then bestow vast pains on altering the resulting picture. This, indeed, is more than a waste of time. It nearly always results in the production of a work which, compared with a pure photograph, is vitiated by manifest imperfections. Even when those imperfections are skilfully minimized, the actual texture of the print can seldom, if ever, come up to that of a print devoid of handwork from an unretouched negative.

There is a great deal of amusement to be obtained from the practice of the craft of combining handwork and photography—as, for instance, in the oil-process. But if the *sole* object be the evocation of a thing of beauty, then the necessity to introduce handwork for the purpose of modifying either the tone-values or the drawing is only proof that the would-be picture-maker does not know his business. Everything in photography lies in the choice of subject. Exposure, development, and printing present no difficulties: to be sure, these processes can almost be reduced to the mechanical. Choice of subject, however, can never be mechanical: it is always individual; and it is in the choice of subject that photographers have their only real chance seriously to exercise personal taste—therefore, their only real chance of being what is called artistic.

The old dispute as to whether photography is or is not an art need hardly concern us. The label does not matter. We are interested only in whether the results produced are beautiful or are not beautiful. Well, this depends utterly on whether the *subjects* are beautiful or not.

Personally, I am more addicted to landscapes than to figures, and I maintain that if a photographer, having secured a landscape negative, finds it essential to revise the subject in printing, then he has selected a subject unsuited to photography. Why should he do so, when there is an endless supply of landscape-subjects which *are* suited to photography? I suspect him of thinking and seeing in terms of some other medium—the medium, probably, whose tools are the pencil and the brush. If he positively cannot find landscapes which make beautiful photographs, if he positively sees the world only as a place which requires its natural compositions recast—a tree deleted here, a shadow lightened there, a cloud introduced in another place—then he should abandon photography, which plainly is not suited to his temperament, and attend a painting-class.

But if the formula for producing beautiful landscape-photographs is thus simple, surely it is even simpler when applied to those works classified generally as "figure-studies." I hold that a "figure-study" practitioner who, having made a picture, solemnly makes an oil-print in order to modify the lighting-effect, straighten the curve of an ugly hand, or what not, is confessing openly that he posed and lighted his model wrongly in the first instance. With studio figure-study work, the photographer creates his picture first and then exposes a plate on his creation. Why should he ever evolve an imperfection, and then photograph it, and by handwork-devices "put it right," when he might have evolved a perfection which did not need any "putting-right," whatever?

Of course, we all know that it is difficult to get these figure-studies flawlessly perfect, in every detail. It is, maybe, even more difficult to find flawlessly perfect landscapes. That cannot be helped. We have to do our best, always remembering that *photography deals with facts*. As soon as we begin to alter facts, we alter photography.

Why should we not alter photography? someone says. My answer is twofold. First, its possibilities are sufficiently delightful without any alteration. Second, alteration results invariably in a product which is cruder than it would have been if no alteration had been attempted. That is, if a "straight" photograph is unbeautiful, it cannot be made beautiful without loss of photographic quality: its unbeautifulness is the photographer's fault, either (*a*) because he chose his subject wrongly, or (*b*) because he exposed and developed it wrongly, or (*c*) because he did both.

Photography's limitations must be recognized. There are limitations in every medium of expression. In literature we are limited to the use of words. In painting we are limited to subjects which can be delineated on the flat, *e.g.*, we cannot show the back of a figure as well as the front, though sculpture can. On the stage we are limited by considerations of space. And so on. The limitations of each art are what give it interest, not merely technically, but æsthetically.

The limitations of photography are considerable but not excessive; and if we believe—as I

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believe—that no one has yet approached the end of photography's possibilities within those limitations, this is all the more reason why we should not strain to go outside them. No other pictorial process gives results that in the least resemble the results of photography. Those results are so wonderful, of their kind, that it seems a pity to struggle to get at results which are texturally less wonderful and exhibit peculiarities that are associated with other mediums. To try to make a photograph like a painting is as ill-advised as to endeavor to make a painting like a photograph.

Let us suppose, then, that I have made a print, and someone tells me that, by using the oil-process or by spreading matte-varnish on sections of the surface of the negative, or by retouching, I might improve it, my reply would be that I decline. If he persuaded me that the defects alluded to are serious ones, I should throw away the negative and turn to the few million other subjects left to me: this picture, one failure among so many possible successes, is not worth bothering with. Should I have exposed and developed correctly, and the result displeases the eye, then my selection of subject was at fault.

Considering any finished print—the product of pure photography, we must either accept or reject. It is idle to put forward suggestions for modifying it. Modifying will only spoil the photograph. To trim the print a little more or a little less is reasonable enough; for trimming does not alter its photographic essence. To print (or enlarge) it with a little more or a little less diffusion of the image is also legitimate, for this, too, is photographic.

The softening of the image obtained by throwing the picture out of focus, either locally or throughout its whole area, in the negative, and that other softening which is brought about by printing through ground-glass or sheets of celluloid or enlarging through bolting-silk, etc., are photographic. They are effects produced delicately by optics and light, not by clumsy manipulation of the image-texture on the emulsion. Moreover, these degrees of softness are highly typical of photography, and of no other

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TOBY WILFRED A. FRENCH

pictorial medium. Painting, for instance, cannot imitate them. The "impressionism" of the painter is not like the photographic diffusion.

The critic, then, in examining a pictorial print produced by pure photography may, with usefulness, suggest trimming, or a greater or less degree of diffusion in the print. After this, it is a case of take it or leave it, its author is justified in saying: This is the best I can do, because it is all that photography can do. The fact that minor factors in the composition, or the shadow-detail, or this, or that, or the other, are hardly what a painter would have wished them to be is no more a valid objection to this photograph than the fact that it is not in colors. The scope of the painter's medium is different from the scope of my medium; and, just as there are some things which he cannot do, so there are some things which I cannot do; and there is no reason why I should trouble myself to try. Photography deals with facts. Point the camera at a beautiful fact and you get a beautiful photograph.

The formula is simple. Putting it into practice is less so. We must merely get as near its achievement as is individually possible, and, for myself, I have concluded that the only treatment which should be administered to a photograph with which we are dissatisfied is—destruction. The author of any given photograph is its sole and final judge. Every photographer should make his pictures to please himself, not to please anyone else. (Fortunately, pictorial photography is not remunerative, so we need not bear hypothetical sales in mind.) He, therefore, can decree the destruction of a photograph or its preservation, and it is nobody's business but his own that he tolerates a highlight which might have been made less bright, or a shadow which should have been less black. These were what photography gave him—the best photography which he could compass.

As he improves in photography he will perpetrate fewer and fewer artistic absurdities. But if he always takes refuge in handwork-remedies he will not only sacrifice photography's subtlety, but he will cease to improve as a practitioner—all his pictures will end by being hybrids—neither photographs nor drawings.

And one of the curious and apparently inevitable outcomes of giving way to the habit of hand-work meddling is that he will endlessly be altering, altering, altering; taking other people's advice; never making a final print which conclusively meets the views either of himself or of anyone else. He becomes less and less able to perform that superb gesture of the good photographer—the throwing away of the imperfect negative into the dustbin. For he is always in a state of incertitude, eternally thinking that "something might be made of it." If something was not made of it when the shutter opened and closed, then nothing can be made of it at any stage thereafter.

The Amateur Photographer.

Still Another System

FREDERICK C. DAVIS

I THOUGHT, when I wrote "A System for the Tank," that I had written about the last possible system. But, now, after looking over various text-books on enlarging, reducing and copying, I find that there is another system to be used profitably. This system is a very short, clear formula, which is applicable to enlarging, reducing and copying —one and all.

Now, rays of light obey definite rules. They follow definite laws and exact proportions, and abide by those rules, laws and proportions in every circumstance. In consequence, when we figure out a system concerning light, we can be sure that it will not vary in the least.

First, let us see how the system can be applied, so that we may gain some knowledge of it. Let us suppose that a promising young photographer is making an enlargement. He wishes to make a five-time enlargement, and so he pushes the enlarging-camera away from the easel or the easel away from the enlarging-camera—whichever it happens to be,—until the correct size of image is thrown upon the screen. Of course, he finds that the image is very much out of focus, because it was focused in the first place. So he focuses until everything is sharp, then the size of the image decreases or increases at an alarming rate and destroys the carefully calculated five-time size. Next, the easel or the camera is moved back or forward, until the image is again the correct size, whereupon the image is again out of focus. So he focuses, and again destroys the correct size; and he goes on, focusing, moving camera and easel, until, at the end of fifteen minutes, he may have the focus and the size right. In this way, a great amount of valuable time is wasted.

Let us consider another photographer: he is reducing, which, of course, is the exact opposite of enlarging. He goes through the same operations, wasting time in focusing and in moving, until, at last, the right distance and focus is found.

And still another photographer is copying a large diagram. He wishes to photograph the diagram so that the print will be one-third the size of the original. Consequently, he thinks, to himself, that the distance from the lens to the diagram should be three times the distance from the lens to the plate, and so arranges it and focuses. But in focusing, the lens is moved from its position of one-third the other distance, and when the plate is developed, it will be found that either the photograph is of the wrong size, or that it is greatly out of focus if it is the right size. Plainly, something could be done in such cases which would be a very great help.

There are many tables worked out for just this use, but they are large, cumbersome and complicated. A table that shows the different distances for lenses from five to twenty-five inches focal length, and from one to twenty time enlargement, contains exactly eight hundred and forty numbers, from which you must select the proper ones to use. Mistakes can be made in following down the columns, and much time can be wasted in reading the figures. There is time lost in trying to decipher the figures in the dim orange light of the enlarging-room; and, if the figures are made large enough to be seen plainly, the table would cover a whole wall.

This fourth system of mine solves this very problem. In the form of a small, easy-to-learn formula, you have the whole thing in a nut-shell.

As I have said, rays of light follow definite and exact laws. It is well known that, to make an enlargement, the distance from the lens to the easel is to the distance from the lens to the plate, as the size of the enlargement is to one. That is a proportion. But the problem is to find the correct distances and still be in focus, without using such a small aperture that the length of time necessary for full exposure would be prohibitive. Persons who do much enlarging, copying and reducing will find this system a God-send, especially when there is an important object near the very edge of the negative which must be in the enlargement, reduction, or copy, and yet have the resulting piece of work of the correct size.

There are two large and complicated formulæ which will find the distance desired.

The formula to find the distance from the lens to the easel:

$$F \times T + F = D$$

Where F is the focal length of the lens, T is the times enlargement (as 4-time, 3-time, 12-time) and D is the distance from the easel to the lens.

The other formula, to find the distance from the lens to the plate:

$$\frac{F \times T + F}{T} = D'$$

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Where F = focal length, T = size, and D′ = distance from lens to plate.

And then, since D plus D′ is equal to the distance from the plate to the easel, the formula for finding that distance is:

$$\frac{(F \times T + F) + (F \times T + F)}{T} = D''$$

Where D″ is the distance from the easel to the plate.

Personally, performing all those mental gymnastics in the effort to find the distances, is worse than straining the eyes in the darkroom. To find the total distance from plate to easel is the only systematic way to go about it; for, however out of focus the image is—when in correct focus—the size will be right if the total distance is correct. Therefore, if we find the total distance from easel to plate, or, rather—in some cases, negative—and then focus, we shall have the correct size of image in correct focus. But doing this my mental calculation is somewhat trying:

"F is 7, T is 11: 7 times 11 is 77, plus 7 is 84. 84 divided by 11 is 7 7/11. 84 plus 7 7/11 is 91 7/11, correct distance."

This is what to do to obtain the figures.

My system eliminates these complicated formulæ, and in their stead gives one easy, accurate formula whose results are exact enough for all work.

My formula:

$$D'' = 1.2\ (F \times T)$$

D″ = total distance.

F = focal length of lens.

T = size of enlargement. (4-time, 3-time, 20-time, etc.)

This formula will not give results exact to the smallest fractions of an inch. But the results it gives are so nearly correct, that the small difference is negligible.

For instance, when using the above two formulæ, the resulting total distance with a lens of 8-inches focal length, for a 10-time enlargement, is 96.8 inches. By the use of my formula, the result is 96 inches—a difference of only .8 inch. In this way, the system can be used for reduction also, by merely reversing the distance: that is, D becomes D′, and D′ becomes D. This also holds true for copying. The photographer will find this system a great help when engaged in the sort of work under consideration.

Between Vacations

HANNAH G. MYRICK

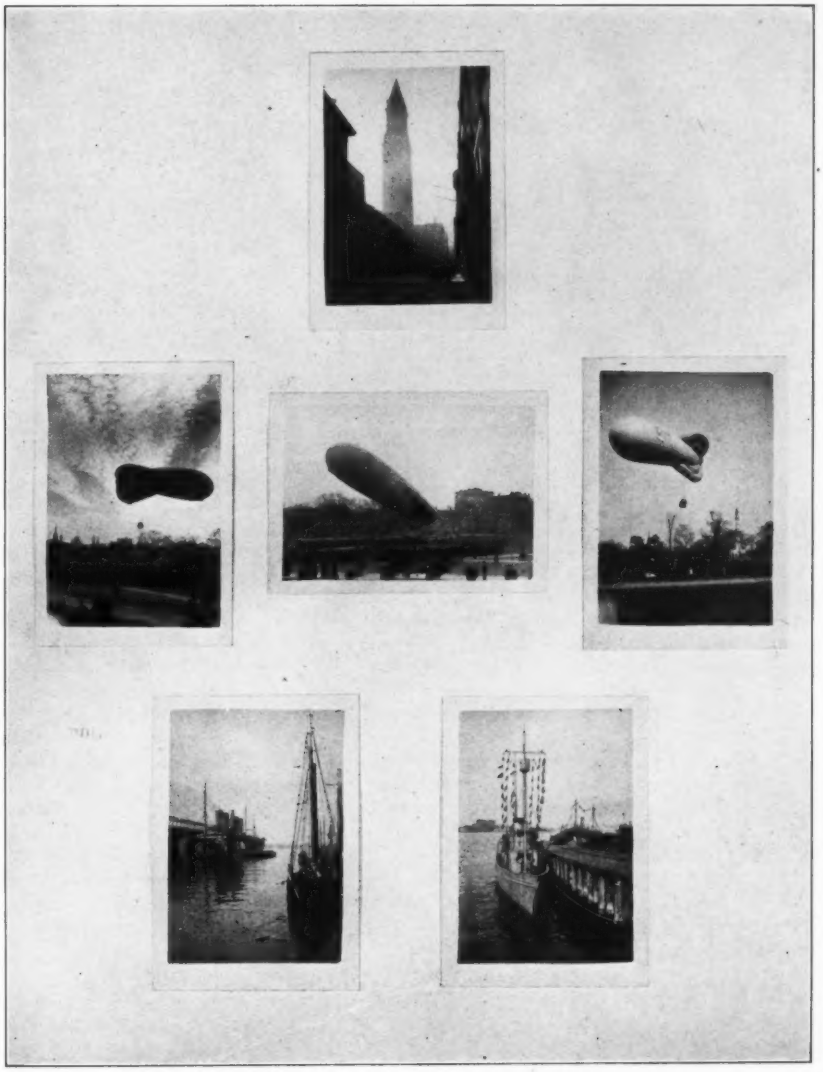
WE read in every issue of our photographic journals that the camera need not be relegated to the closet-shelf for eight months in the year. Many of us heed the reminder and keep a camera at hand for use on some special occasion, such as a tramp on snowshoes, an unusual snowfall, or some indoor-work.

But "stay-at-home" photography is by no means limited to snow-studies and interiors; nor is the camera a companion for our holidays alone. I know of nothing to compare with photography as a "hobby" for the business-man or woman. One paramount advantage of this hobby is that, excepting the actual exposure of the plate, all the work can be done at night. In this connection, let me add that artificial light-studies are in themselves a fascinating and instructive branch of photography. It is an absorbing pursuit, and in it one can put aside for an hour all the cares and worries of the day.

What dreams we all have of the pictures we would make in this manner, or that, if we only had the *time!* Yet I sometimes wonder if we *had* time to devote uninterruptedly to our hobby, whether the actual enjoyment would be as intense as in the occasional hours stolen from the day or prolonged far into the night. Be that as it may, I know that I have derived more benefit and pleasure from my camera during the eleven months of the year in the city than in the four blissful weeks of vacation; although during these vacation-weeks the little instrument is my constant companion.

Note this, too, that although friends may admire and praise the vacation-prints—especially if they are of familiar scenes—the pictures made right in our home-surroundings will elicit far more genuine interest. It is amusing to show some familiar object from an unusual viewpoint, and to hear the invariable exclamation, "Why, where did you make that?" For instance, I have photographed the Boston Custom House from half a dozen viewpoints, that show aspects of it that were unknown to my companions who see its towering beauty every day as they go to and from the city.

Speaking of the Custom House, I was first impressed with its pictorial possibilities when, crossing one of our so-called "squares," I



CUSTOM-HOUSE TOWER
BALLOON ON THE COMMON
WATERFRONT VIEWS
HANNAH G. MYRICK

happened to glance along one of the intersecting streets and saw the white tower catch the afternoon-sun and the streets below in deep shadow. I carried the impression with me and the next time that I had occasion to go to that part of the city I made sure that my camera was in my wrist-bag. Just ten minutes were consumed in making the exposures. But it was only a beginning. Another day I visited an entirely different part of the city and obtained pictures on a much larger scale. Again, a ferry-trip enabled me to catch the tower with the harbor as foreground. Each negative suggested new possibilities, and I soon acquired the habit of slipping the camera into my bag whenever I went out. Here is where the pocket-camera proves of inestimable value. My 4 x 5 outfit rests undisturbed on the shelf for months at a time, not despised or forgotten,—for it served its purpose as a teacher, with its ground-glass for focusing and composition,—but all that I could do with it is done far more easily with the little pocket-instrument.

I never appreciated the advantages of the hand-camera more keenly than one day at a balloon-ascension. The huge "elephant" ascended and descended so rapidly that lens and shutter adjustments had to be ready for an instantaneous exposure. Moreover, the size of the balloon was so deceptive when it was high in the air that it was necessary to take one's stand at a considerable distance from the crowd that surrounded the landing-place in order to include the whole of the "monster" on the film. I had to change my place several times before I found just the right distance, and in doing so I noticed another enthusiast equipped with a tripod and a 4 x 5 camera. Each time the balloon made a trip, he would adjust the tripod anew, scrutinize the view on the ground-glass, and then await the crucial moment of ascent or descent only to find everything right but the balloon! I don't know the outcome. When I left, he was still retreating, a few feet at a time, and apparently without having made an exposure! One of my pictures included him on the outskirts of the crowd peering at the ground-glass.

The waterfront of a city is rich in subjects for the enterprising amateur. A half-hour of an afternoon spent among the docks is not only filled with interest, but the fresh air is an excellent tonic after the city-dust and smoke. Fishing-vessels unloading at the wharf, small craft of every description, and, if luck is with you, perchance a transport recently arrived from France and still bedecked with banners—all offer excellent pictorial material. And this may be found within ten minutes' walk of one's familiar haunts! But without the incentive of your chosen hobby, you may never even know the existence of the highways and byways by which these scenes are reached. The truth of this I have proved repeatedly when showing prints to friends who lived or worked in the very neighborhood. "When did you get time to make all these?" Not all at once. "The readiness is all." Keep the camera in your pocket or bag, and with it the yellow filter, hood, notebook, etc. The notebook should never be forgotten; complete data of every exposure adds tremendously to the interest of the result, and is invaluable to acquire experience: date, hour,—always standard sun-time, not the daylight-saving hour,—weather-conditions, stop used, exposure given, distance for which focused, filter used, make of film or plate, etc., — this supplemented later by notes of developer used, degree of dilution, number of minutes in developer, paper used for print, etc. Don't trust the memory for these details, all or any of them. Because you are at present using only one brand of film, or one particular developer, do not neglect to note it for every negative; a year hence you may have changed to something quite different.

This is too much like work for a pastime? Well, it is true of photography as of all else, one gets out of it what one puts into it. The amateur who makes his exposures and stops there, leaving all else—developing, printing, enlarging—to the commercial finisher, knows nothing of the real pleasure of a camera. He may be spared many sad disappointments, the mortification of stupid blunders, the weariness of "cleaning up" at the end of an evening; but he loses the satisfaction of carrying the process to completion, the delight of experiment, and, above all, the experience that nothing but actual performance of each step can teach.

Photographing Wildflowers

BUT perhaps the most urgently important work to be done by amateur photographers, especially in large towns and cities, is the making of records of wildflowers, for use in schools. These are needed, not primarily for classes in botany, but for use in nature-study, for freehand-drawing, to furnish help in design, and for training the eye to perceive beauty. A glance at such examples of work in this field, as Plates XIII and XV exhibit, is enough to convince anybody of the value of photographic material of this kind.—*Photography and Fine Art.*

SHADOWY POOL — W. S. LEE

Snapshots

W. S. LEE

I HAVE read much in the PHOTO-ERA, from time to time, concerning the various methods of manipulation and how to compose pictures, and inasmuch as I take much pleasure in reading the experiences of others, I wonder if it is best always to go by what one reads without exception, and I am convinced that, after all, the most that any writer can hope for, is to start others to thinking along original lines.

The thing that often baffles me is the lack of some necessary component to furnish balance to the picture. I have learned to put in a few simple clouds and to soften the too sharp shorelines, such as are found in parks, where the caretakers take such care to cut down all the beautiful cat-tails which the average artist would go a long way to find. But I have no success in putting in trees and stumps, nor yet, cattle. In the picture, "Sunny Pastures," I wanted some cows to come and feed at a certain place—no necessity to point it out—and, although there were plenty of them scattered around, in different parts of the field, none could be persuaded to assist me.

In "Shadowy Pool," I feel certain that an artist would condemn this picture if for no other reason than the curve of the trees, which is reversed from what is usually seen in composition. It seems to me that the trees, if curved, should advance in a sort of parabola and to such an extent that the descending curve should terminate inside of the picture-space. Did I waste a film on this picture?

It sometimes happens that what a worker denounces as useless to-day, he will be enthusiastic about to-morrow. There was a time when nothing short of a 5 x 7 camera with a whale of a lens screwed into it would satisfy me, and I toted it around for several years before I was willing to give the smaller camera a trial. Now, I use a light 4 x 5 with film-pack. It is equipped with a 6½ F/7.5 lens, called an anastigmat; but it's all the same to me.

By experimenting, I found that the diaphragm

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would open to about F/6.8. I almost always use it this way, as it gives a little more roundness and softer effects. I ruled the ground-glass to 3¼ x 4¼ and endeavor to keep the picture within these limits, using the full size of the film only in emergencies. Certainly, the whole of the film is exposed and developed; but it is not made use of or counted on when making the exposure. It does come in rather handy, at times when I wish to include more of my subject.

SUNNY PASTURES W. S. LEE

My old 5 x 7 is now doing service as an enlarger. I made a light-box out of some beaverboard which I happened to have on hand, using a sheet of patent-office paper as a reflector and an opal glass for a light-diffuser. For light, two 100-watt nitrogen bulbs are placed about six inches from the opal glass. This box goes on in place of the detachable camera-back. For a stand, I place one end of a center-board out of the dining-table under the hand-hold of the window-sash, first locking the window. For an easel, I pasted two pieces of backing-board together flatwise and on this a sheet of ruled white paper for focusing. I use glass-headed pins for fastening the bromide paper in place. I had the everlasting nerve to screw this to the molding in the darkroom over the bath-tub. Perhaps, this enlarger would not appeal to some, but I think I have seen better pictures with worse apparatus.

One thing that the pictorialist requires is a lens that will stretch things on somewhat the same principle on which an artist's mind operates. Otherwise, if he does not care to have roads and streams taper off like a wedge, he can make use of a long-focus lens as the best substitute. What we want is a lens that will magnify the distance and at the same time preserve the natural aspects of the foreground. However, I suppose such a lens is highly improbable or we would have it by this time.

Some shoot well and others shoot often, but most fail to shoot hard enough to make a sure killing. Some fellows feel that with their lenses they can do any thing at any time. The trouble is, they gamble too much on their large calibers and not enough on judgment. Within comparatively large limits a good plate will stand a lot of overexposure, if you wish to call it that. In fact, two negatives of widely varying exposures can be developed to give such results, on most any printing-medium, the difference in which

would scarcely be discernible. So why split hairs? There are many printing-processes which may be used with which almost any effect your heart desires may be attained, if the negative has any backbone to it. Otherwise you will find that its future possibilities are limited to about one-half.

There are those who cannot understand just how a tank can be depended upon to develop both snapshots and time-exposures correctly at one and the same time! The answer is, It will do all that can be done in this respect. If the snapshot is undertimed to such an extent that part of the film is not affected, that part is going to be clear film whether you use the tray or the tank, as neither of these has the power to produce detail. In case of either under- or over-exposure, the developer which is much diluted simply keeps working as long as there is any work to be done and then it simply stops and no amount of tears can induce the tank or tray to do more.

If you want a picture or rather a negative developed correctly, begin with the exposure and don't trust that high-powered anastigmat to do it all, for it is no faster at F/16 than any other lens.

What happens when paintings are reduced to monochrome is not much worse than what has happened to many fair photographs by being daubed with color. I am of the opinion that many very good specimens of amateur-work can, more often than not, be ruined by the very thing a painting mostly depends upon.

Definition of an amateur (from the Rubaiyat):

> "We are no other than a moving row
> Of Magic Shadow-shapes that come and go
> Round with the Sun-illumined Lantern held
> In Midnight by the Master of the Show."

All of the pictures that accompany this article were exposed according to Wynne's Exposure Meter. The time was taken with the three-time filter over the tinting-opening. The developing was done by tank, using the formulæ given by The Cramer Dry-Plate Co., which will be found in the directions in each box of plates. The enlargements are all on P.M.C. No. 7.

The Chemistry of Intensification and Toning

INTENSIFICATION is photographically the direct opposite of reduction, the object being to increase contrast. This is done by the deposition of some other material on the silver-image. A silver-image, for instance, can be very much intensified by toning it with uranium, the reddish brown uranium ferrocyanide having very great printing-strength and making quite a weak negative into one having a great effective contrast for printing-purposes. Usually, however, intensification is formed by depositing silver or mercury upon the image, and most photographic intensifiers depend upon the use of mercury.

Mercury is a metal which forms two series of salts—the mercuric salts, which are in a higher degree of oxidation, and the mercurous salts.

Many of the mercuric salts are insoluble in water; but mercuric chloride is sufficiently soluble for practical use, and when a silver-image is placed in a solution of mercuric chloride, this reacts with the silver and forms a mixture of mercurous chloride and silver chloride.

The bleached image, which appears white, can then be treated in various ways. If it is developed, for instance, both the silver chloride and the mercurous chloride will be reduced to the metal, and in addition to the silver, with which we started, we shall have added to every part of silver an equal part of mercury. Instead of using a developer we may blacken the image with ammonia, which forms a black mercury ammonium chloride and produces a high degree of intensification.

Mercuric Chloride is a virulently poisonous salt known popularly as "corrosive sublimate." Its only use in photography is for intensification, and it is obtained in white, heavy crystals which are soluble with some difficulty in water.

Another intensifier which calls for notice here, is the chromium intensifier. The silver-image is bleached with a solution of bichromate containing a very little hydrochloric acid, bichromate being an oxidizer of the same type as permanganate or ferricyanide. The image is then redeveloped and will be found to be intensified to an appreciable extent. This intensifier has found increasing favor owing to ease and certainty of operation.

Potassium Bichromate is made by the oxidation of chromium salts. It forms orange-red crystals, stable in air, and is easily soluble to a

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yellow solution. It is obtained in a pure form by crystallization. Potassium bichromate is used in photography both to bleach negatives and to sensitize gelatine, fish-glue, etc. When gelatine containing bichromate is exposed to light it becomes insoluble in water and in this way images may be obtained accurately in insoluble gelatine.

Silver sulphide is the most insoluble compound of silver, and consequently if a silver-image or a silver halide salt is treated with sulphur or a sulphide, respectively, they will at once be transformed into silver sulphide. Silver sulphide has a color varying from light brown to black, according to its state of subdivision, and the transformation of the image into silver sulphide is by far the most popular method to tone developing-out paper prints, the prints so toned being generally known as "sepia" prints.

There are two general methods to transform the image into silver sulphide:

A. Direct toning, with the hypo alum bath; and

B. Bleaching and redevelopment.

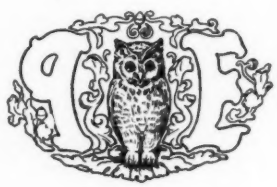
A. As was explained in the article dealing with fixing, when an acid is added to a solution of hypo, it tends to precipitate sulphur. Now, a solution of alum in water is weakly acid, so that if alum is added to plain hypo without any sulphite present, the solution will, after a time, become turbid and precipitate sulphur. This solution of alum and hypo at the point where it is ready to precipitate the sulphur may be considered as having free sulphur in solution; and, if prints are immersed in a hot solution of alum and hypo, the silver-image will be converted directly into silver sulphide and the prints will be toned brown. Only one precaution is necessary in order to obtain successful results with the hypo-alum toning-bath. The bath tends to dissolve the image and consequently if a fresh bath is used, it will weaken the print, eating out the highlights. In order to prevent this, a little silver must be added to the bath, either in the form of silver nitrate or by toning a number of waste prints or by throwing in old printing-out prints, which contain free silver. A bath lasts for a long time, and as a general rule a hypo-alum solution which has been somewhat used works better and yields more pleasing pictorial results than a fresh bath.

B. The greatest objection to the hypo-alum bath is that the bath has a somewhat disagreeable odor, sulphur compounds being liberated from it, and it is rather troublesome to use a bath which has to be heated, so that although hypo-alum toning is used on the large scale, smaller quantities of prints are commonly toned by bleaching the silver-bromide print in a bath of ferricyanide and bromide, and then treating the bleached print, after washing, with sodium sulphide, which converts the silver-bromide directly into silver sulphide.

Sodium sulphide occurs in white, transparent crystals, which have a strong affinity for water and so quickly deliquesce unless kept carefully protected from the air. It is best kept in a strong stock-solution. It is a chemical which very often contains impurities, chiefly iron, and only "tested" sulphite should be used. Old sodium sulphide often contains hypo, since hypo is produced in the oxidation of sulphide, and if hypo is present in any considerable amount, some of the silver bromide will be dissolved by it and the print will lose strength in the highlights and give a very inferior result.

All sulphides give off a certain amount of hydrogen sulphide, which smells offensive, and which is extremely dangerous to photographic materials, since a very small amount of hydrogen sulphide will convert enough of the silver-bromide or chloride of the material into sulphide to produce a severe fog. No photographic materials should therefore be stored in a room where sulphides are kept or where sulphide-toning is carried on.

It has already been explained that the color of silver sulphide depends upon its state of division, and since the state of division of the toned image depends upon that of the untoned image and this again upon the treatment of the material, it is evident that the exposure and development of the print will have an effect upon the result obtained. As a general rule, it may be stated that to get good colors in sulphide-toning it is necessary that a print should have been fully developed and not overexposed; a print which is very fully exposed and then developed for a short time will not give a good tone.—*Studio-Light.*



EDITORIAL

Work for Camera-Clubs

IN the October issue, seven years ago, PHOTO-ERA invited the attention of camera-clubs to the various ways in which they could improve their usefulness in the community. Among the activities suggested was the effort by camera-clubs to improve the appearance of the city, by photographing any evidence of neglect and to bring it to the attention of the authorities. If such efforts proved futile, illustrated talks on the subject would arouse public sentiment and oblige the city-fathers to act. This plan was adopted by a number of camera-clubs in this country, and much practical good was the result. PHOTO-ERA has published several illustrated articles on photography and civic improvement accompanied by photographs of convincing power, showing the practicability and success of the camera as a means to perform an important public service. Amateur photographers, who take a personal pride in the appearance of the city in which they live, scarcely realize the power they can exert by means of a little pocket-equipment, and to what extent their community would benefit by their intelligent and sympathetic activity.

In this connection, there is the example of E. R. Dickson, of Newark, N. J., who, perceiving the possibilities of artistic interpretation of the public buildings of his city, produced a photograph of such impressive beauty that the municipal art-commission engaged him to make an entire series of pictures of that character—a task that proved to be eminently gratifying to all concerned. Another case in point is the photograph of the classically beautiful and imposing Municipal Group of Springfield, Mass., reproduced on page 106, August, 1919, issue. The one, until recently sent out by the Chamber of Commerce in its publicity-work, was strikingly poor in workmanship. After the matter had been brought to the attention of the publicity-manager by a local amateur photographer, an expert specialist was engaged immediately to make a creditable photograph of Springfield's civic masterpiece. He succeeded brilliantly, as may be seen. Here, then, are suggestions for a kind of coöperation that should appeal to every active camera-club throughout the land. All that is necessary is incentive, civic pride and sustained interest. The reward is in the result.

Photographic Window-Transparencies

INQUIRIES have been made why photographic practice no longer includes window-transparencies, which enjoyed a considerable vogue about thirty years ago. The answer seems to be that amateur-workers who have kept abreast of the improvements in technical processes, have lost interest in what they considered a simple mechanical procedure. All that was required to produce a satisfactory transparency was to expose a plate of low sensitiveness, faced by the glass negative, to the light of a gas-flame for a number of seconds, develop and fix in the usual way. Faced by a sheet of plain glass and backed by one of ground-glass—held firmly together by a transparency-frame—the positive picture was ready to be suspended in the window. Another reason is that the then popular sizes of plate-cameras—5 x 7 and 6½ x 8½ inches—have been largely superseded by smaller ones and also, to a very large extent, by pocket-cameras; and contact-positives of corresponding dimensions scarcely would be acceptable as window-decorations. Moreover, the tendency—thirty years ago—was towards uniformly sharp definition and, it may be—no disrespect is intended to those early conscientious workers—that the workmanship of many of those technically beautiful transparencies suffered by comparison with the breadth of treatment that marked the pictures of succeeding pictorial workers. In view of the reasons which may explain the absence in artistic homes of such pleasing decorations as transparent photographic positives, it would not be a bad suggestion that this long-neglected department of photographic activity be revived. Certainly, photographs of this character are susceptible to treatment that may convert negatives of uniformly clear detail into positives of agreeably diffused definition. This can be accomplished by interposing several sheets of thin transparent celluloid between the negative and the sensitized plate. If the original negative be small, then enlarged positives can be made by means of soft-focus lenses in the same manner as softly defined bromide enlargements. The effect of a window-transparency is sometimes enhanced by wide, clear margins, the same as in photographic prints or etchings, as explained in a practical article printed in the March, 1919, issue of PHOTO-ERA.

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ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA, Advanced Competition
367 Boylston Street, Boston, U. S. A.

Prizes

First Prize: Value $10.00.
Second Prize: Value $5.00.
Third Prize: Value $2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.

Certificates of award, printed on parchment-paper, signed by the Publisher, and suitable for framing, will be sent on request, and free of charge, to winners of prizes or Honorable Mention.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. ***No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era awards are announced.*** Prints on rough or linen-finish surface are not suitable for reproduction, and should be accompanied by smooth prints on P. O. P., or developing-paper having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. *Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter,* SENT SEPARATELY, *giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks will be sent upon request.* ***Be sure to state on the back of every print exactly for what competition it is intended.***

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. Competitors are requested not to send prints whose mounts exceed about 11 x 14 inches, unless they are packed with *double thicknesses of* ***stiff*** *corrugated board, not the flexible kind—or with thin wood-veneer.* Large packages may be sent by express.

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Shore-Scenes Competition
Closed August 31, 1919

First Prize: Kenneth D. Smith.
Second Prize: George W. French.
Third Prize: Austin P. Wade.

Honorable Mention: Charles P. Abs, Ross W. Baker, Lester W. Ballou, Beatrice B. Bell, Henry Boak, L. C. Byke, Mary Ross Calvert, F. A. Holston, Dr. J. E. Horning, Franklin I. Jordan, C. Verne Klintworth, Emile H. Kopp, Jr., Alexander Murray, J. Charles O'Brien, Jr., H. B. Rudolph, J. Herbert Saunders, W. C. Sawyer, E. R. Schaeffer, Edwards H. Smith, Joseph Coburn Smith, E. Radeker Stancliff.

Subjects for Competition—1919

"Architectural Subjects." Closes October 31.
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.

1920

"Twilight-Pictures." Closes January 31.
"Still-Life." Closes February 28.
"Nature-Studies." Closes March 31.
"Rainy-Day Pictures." Closes April 30.
"Miscellaneous." Closes May 31.
"Speed-Pictures." Closes June 30.
"Rural Scenes." Closes July 31.
"Shore-Scenes." Closes August 31.
"Outdoor-Genres." Closes September 30.

Photo-Era Prize-Cup

IN deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize ($10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

THE studio-proprietor who puts on the street-front of his building a glazed frame of specimen-portraits without noticing that it reflects a dazzling white building directly opposite, is a—well, it's simply impossible for anyone to see the display.

FIRST PRIZE
SHORE-SCENES

THE PLUNGER — KENNETH D. SMITH

Items About the Vest-Pocket Camera

As we have mentioned now and again in these columns, the vest-pocket camera, now so popular with the amateur worker, is an instrument not to be neglected by the professional photographer. Although it can never supplant cameras of much larger size which are employed on tripods, it has supplementary uses for which its small size and optical performance particularly qualify it. There are many occasions when photographs are required in addition to those which the photographer has equipped himself to make. A vest-pocket camera with an ample supply of plates or roll-film occupies an insignificant space in the larger kit; yet, is able to turn out work which can be quite satisfactory for commercial purposes. In other conditions the possession of the small camera may encourage the photographer to make negatives speculatively: the time and cost thereby involved are small, and will often be repaid by the orders obtained. From these considerations some thought may well be given to the choice of a camera of this size and to the best methods to use it.

With regard to the camera, the first essential is that it should be of the finest mechanical construction and fitted with a lens as good as can be had. In an instrument of this small size, where a difference of a fraction of an inch may spoil the definition, it is bad policy to buy a camera which does not provide a thoroughly rigid and square position of the lens in relation to the plate or one which is liable to develop defects with use. There is fortunately considerable choice. The purchaser may choose between cameras of the folding focal-plane type, in which the lens-front is held forward by a system of rigid struts, and those of the folding drop-bed type. In both classes, instruments are to be found which are beyond criticism in their mechanical construction. As a rule makers fit a lens of F/4.5 aperture, and in many circumstances there is an advantage in this maximum speed. Moreover, F/4.5 is the fashion, and a camera of this aperture is much more salable, if one wants to dispose of it, than one of F/5.6 or F/6. Nevertheless, for such commercial photography as may be undertaken with a vest-pocket camera, there is little to be gained in having a larger aperture than F/6. The negatives are made with a view to enlargement to 6½ x 8½ size, and for this purpose the greater depth and more crisp definition at

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VIEW NEAR JAFFREY, N.H. GEORGE W. FRENCH

SECOND PRIZE — SHORE-SCENES

F/6 are recommendations for this aperture. With regard to focal length, we are largely in the hands of the manufacturers; but it may be said, even if a camera can be found, there is no object in having a lens of focus shorter than three inches. Rise of front, if it can be had, is certainly an advantage at times; but most cameras of this size are without it. Thus, where the camera has to be tilted in order to include parts of a subject which contain vertical lines, recourse must be had to correction when enlarging by the customary method of tilting both the negative and the bromide paper towards each other.

For various reasons roll-film is to be recommended for the vest-pocket camera. The camera is ready for use at a moment's notice, development of the small negatives is done more readily and without touching them than when plates are used, and it is the experience of many that small mechanical defects of manufacture are of less occurrence in these small roll-films than in plates of the same size. It may be urged that the use of roll-film prohibits focusing on the ground-glass; but in any case the image on a vest-pocket camera is really too small to be seen satisfactorily, and it is quite safe to rely for the arrangement and focusing of the image upon a tested direct-vision finder and focusing-scale.

The great merit of the vest-pocket camera for many branches of commercial photography, and particularly for indoor-subjects, is the combination of rapidity and depth of focus which results from the use of such a short-focus lens. As the reader can readily reckon for himself a 3-inch lens of F/4.5 corresponds with regard to depth of focus, with a 10-inch lens at F/16, and the former has the advantage over the latter as regards shortness of exposure of more than twelve times. In other words, for work such as the indoor-photography of machines and similar subjects, the user of a vest-pocket camera is able to make a whole series of exposures during the time that one plate is being exposed with his larger outfit. A light tripod is almost necessary for this work, although some commercial photographers that we have known carry a little fitting on the head of the ordinary tripod consisting of a grip for a vest-pocket camera. In photographing, even on such a small scale as 60 x 45 mm., the mistake must not be made to get too close to the subject. It is by so doing that the results with the small instrument are likely to be condemned as unsatisfactory. The drawing or perspective of a solid object is conditioned by the distance of the lens from it. Although, its near viewpoint is the least satisfactory element in the use of the vest-pocket camera, a rendering of the subject, which would be defective from this cause, will be better as the camera is used further away. At the same time, with the correct adjustment of the focusing-scale, depth of definition will be correspondingly greater and the enlarged print show to correspondingly better advantage with regard to detail.

A general sharpness all over the picture-area is the greatest merit that a vest-pocket camera negative can possess, and if care is taken when focusing there ought to be no difficulty in making enlargements perfectly sharp from corner to corner from each negative; but the definition in the first place must be needle sharp. Perhaps the most formidable difficulty in the way of making large prints from the tiny negatives is the

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A STORY ON THE SAND — AUSTIN P. WADE

THIRD PRIZE — SHORE-SCENES

grain of the latter. Much may be done to avoid this grain by the use of plates of somewhat slower speed, and by the employment of a developing formula which results in an image of finer grain. The Wellington borax metol-hydroquinone developer is a most satisfactory formula for this purpose, and it is hardly necessary to point out that, as in the treatment of any plate, unforced development is a condition for the production of a silver-image of the finest grain.

With regard to enlarging, it need only be said that where enlarged prints over 6½ x 8½ size are required, a certain amount of working-up may be necessary. Such work on the small negatives is very inadvisable; the better plan, apart from simple spotting, is to make an enlargement upon smooth bromide paper, and work upon that. A copy-negative is then made from the worked-up enlargement upon a plate of the same size.

The British Journal.

Waterproof Ink to Make Line-Drawings from Photographs

A SILVER-PRINT may have the image upon it drawn over with some waterproof ink, and then, when this ink is dry, the photographic image may be reduced right away, leaving nothing but the ink-lines. Waterproof ink, that is to say, ink which is not disturbed when once it is dry by any subsequent wetting, is obtainable from any dealer in artists' materials. *The Amateur Photographer* gives the following formula, if waterproof-ink cannot be got, for it may be extemporized at home by making a solution of half an ounce of borax in five ounces of hot water. An ounce of shellac is added, and the mixture is boiled and stirred until the shellac is dissolved, after which the liquid may be strained through a piece of cambric. Sufficient black pigment is added to this to make it serve as an ink. Moist water color, ivory black, is very suitable, or India ink can be used. Ordinary powdered lampblack will do if nothing better is available; but the prepared water-color is superior, as it has been well ground and already has some vehicle with it. The plain solution of shellac may be applied to paper on which there is a drawing, by means of a spray diffuser, and will serve to fix the drawing.

A Triumph for the Vest-Pocket Camera

AN instance of the practical value of the vest-pocket camera under very trying circumstances, is reported by *The British Journal.* A professional was called in to photograph a group around the table at a children's tea-party. The circumstances were against the production of a good result. The little sitters were of all ages and more or less restless. The group was in different planes, necessitating careful focusing and stopping down, and the light was bad. Two or three exposures were made with an ordinary field-camera and then, almost in desperation, the photographer ran off half a dozen rapid exposures upon a spool of film in quite an ordinary vest-pocket camera. When the whole of the exposures were developed, comparison proved almost an astonishing revelation. Each of the tiny negatives was in every practical point perfect, whereas those made with the larger instrument showed that several of the little sitters had moved during the long exposure. From the selected negatives, several dozen prints were made through the enlarger which delighted the customer and enhanced the reputation of the photographer. All of which went to show that the vest-pocket camera suits all photographic activities.

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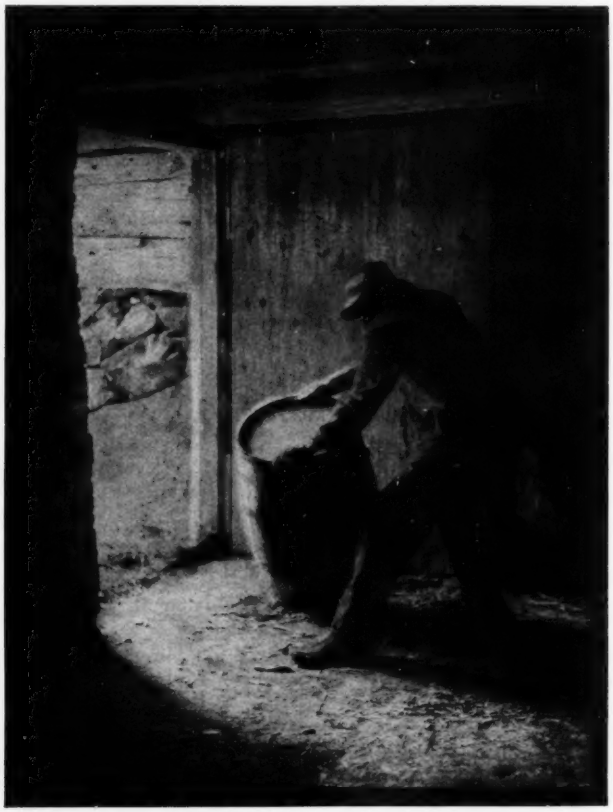
SUBJECT FOR NEXT COMPETITION

ADVANCED WORKERS



BENDING TO THE TASK — GEORGE W. FRENCH

Advanced Competition—Indoor-Genres
Closes December 31, 1919

It is a question whether outdoor—or indoor—genres are the more attractive to the average camerist. That both are popular, is proved convincingly by the large number of pictures that are sent in for the competitions devoted to these subjects. Genre-photography, whether indoor or outdoor, is one of the most difficult branches to master. The human element involved is no small factor in the success or failure of the worker. On the other hand, there is much satisfaction in being able to solve the technical, artistic and human equations that follow one another in quick succession. During the fall and winter, there are innumerable opportunities to obtain delightful indoor-genres of friends, family and home. Remember that the value and charm of a genre is its fidelity to fact. It must ring true.

In making indoor-genres, daylight, artificial light and flashlight apparatus may be used. However, the least expensive illuminants at present are daylight and gas or electric light. A cloudy, bright day is particularly good for indoor-photography. There being no sun to cast heavy shadows or annoy the subject by its brilliancy, the camerist may work with comparative freedom. He will need virtually no diffusing-screens; and a sheet placed judiciously to reflect the light where it is needed will about complete the necessary preparations. Of course, care must be taken to expose correctly and to use the plate or film best adapted to this sort of work. This remark ap-

plies as well to indoor-genres made by artificial light. A nitrogen-filled electric-lamp will produce a strong actinic light that will enable the worker to obtain excellent results at night. However, owing to the very intensity of the illumination various forms of light-diffusion must be evolved in order to avoid extremely harsh contrasts and unpleasing facial expressions. Care should be taken to make sure that the wiring of the house and the service electric current will permit such a powerful lamp to be used without danger of blowing out the fuses and otherwise injuring the wiring in the house. In most cases, the use of a nitrogen-filled electric lamp will cause no trouble and it is by far the most effective illuminant because there is no noise, smoke or dust. Two or more of these nitrogen-filled lamps—they may be obtained up to 1,000 candle-power, I believe—should answer all requirements. Then, we have several types of electric home-portrait lamps which use a special type of carbon in an arc and these give out an intense though comparatively soft actinic light. There are several excellent portrait-flashlamps on the market to-day that may be used with a minimum of danger, smoke and dust. Obviously, these outfits are more expensive than the nitrogen-filled electric-lamps; but if the camerist can afford one of these outfits, he should be able to produce excellent results. Even the old-fashioned gas, with the aid of the modern gas-mantle, affords actinic light to enable the camerist to make indoor-genres successfully. Of course, the use of gas does not give the worker so much opportunity to place the illumination where it will do the most good. However, a little originality will work wonders, and even a gas reading-lamp may be made to serve the purpose. Those who may demur at the use of flash-powder should remember that the modern flashlight-outfit with its flashbag virtually does away with the smoke-nuisance and, at the same time, so muffles the noise of the explosion that the subject is not perturbed in the least.

Of perennial interest are baby-pictures. They are always of surpassing interest and of unsurpassed difficulty to make. Why it is that doting mothers insist upon clothing their little darlings in a mass of white lace and frills when they are to be photographed, is one of the unanswerable riddles to the photographer, although the use of white is the most natural color for the mothers to use. Not only do they dress them up in all manner of finery, but they insist that baby be placed in the center of another white expanse such as a large pillow, white-lined basket or crib. It is virtually impossible to photograph a baby's white dress and obtain detail and softness, and, at the same time, obtain a pleasing picture of baby's face. The dress requires a longer exposure than baby's face and, obviously, baby cannot be controlled long enough to permit the proper exposure of both dress and face to be made. The problem would be greatly simplified if mothers would forego the wonderful infant dress-creations in favor of a truly delightful picture of baby's laugh or smile. In one sense it is just as absurd to dress up baby for an indoor-genre as it would be to show mother preserving pickles clad in her evening-gown. Such pictures do not ring true. "Photograph your subjects as you find them," is a good rule for the genre-photographer to follow, if he would succeed.

In seeking subjects for this competition, it would not be fair to our animal pets to neglect them. There is no reason why a dog or cat or other pet should not make a good indoor-genre. Even if they could not be used as the main subject, they might be used to great advantage as part of the general theme. For example, if grandmother was depicted as knitting before the fire nothing would add more to the appeal of the picture than a cat or a dog curled up at her feet. No doubt, the camerist could devise other ways to use available pets in making indoor-genres. However, whenever pets are employed, they should conform to the general rule that there must be no posing. If the dog will not lie down naturally, in the spot where he is wanted to complete the picture, leave him out or change to a place in the room where he will lie down and look thoroughly at ease and comfortable. In no circumstances force the issue; he will show the effects of any coercion and thus spoil the harmony of the composition.

Many suitable subjects for this competition may be found in the business and professional life of our readers. Moreover, there are many possibilities in the home-life of each one of us. A well-executed indoor-genre of the grocer behind his counter, the lawyer advising a client, the literary man at work or father sifting the ashes, are all likely subjects if properly done. The picture that heads this competition, as an example, proves my point. Here we have a very simple theme, indeed. A man is merely rolling a barrel out of a shed; but note what a masterpiece George W. French made of this prosaic incident. Elsewhere in this issue, reference is made to the technical and artistic value of this exceptional picture. The simple things in art and in life are always the most difficult to express pictorially. There is no finer artistic goal to strive for than the pictorial expression of the things in our lives that are the simplest and the truest.

The making of indoor-genres demands an unusual degree of tact, artistic perception and a sense of humor. If the camerist attempts to succeed by assuming a dictatorial manner, or by forcing his subjects to do things that are uncongenial or unnatural to them, he will fail to make the sort of indoor-genres that the jury will approve. I cannot emphasize too strongly the necessity to make the picture conform to the characteristics of the subject. Moreover, do not desert fact to obtain an effect. By that I mean, do not depict father enjoying an after-dinner cigar when he was never known to smoke anything but a pipe; and do not show sister at the piano when she has never played a note in her life. Even though strangers may not be aware of these discrepancies, often, the subjects themselves will betray the deception by their stiff and "posey" attitudes. The best rule is to stick to fact, no matter how much opportunity there is to resort to pictorial dissimulation. This same rule should apply to every picture that is sent to this competition. The charm of a good indoor-genre is its naturalness, ease and spontaneity of thought and action. Remember always that an indoor-genre at its best depicts persons, pets and surroundings as they are and not as they should or might be. The pictures that live the longest are those that compel attention by their forceful fidelity to fact.

An attractive feature of this Indoor-Genre Competition is that it gives full play to the individuality of the camerist. The only restrictions are those of an artistic and technical nature. Obviously, the picture should be adapted to the competition; but virtually any indoor subject that includes life, is eligible. We are eager to have amateur and professional workers enter this competition with enthusiasm as we know that the experience will prove invaluable. We learn by doing; and in this manner only do we become aware of our own powers.

A. H. B.

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BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA, Beginners' Competition
367 Boylston Street, Boston, Mass., U. S. A.

Prizes

First Prize: Value, $2.50.
Second Prize: Value, $1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Certificates of award, printed on parchment-paper signed by the Publisher, and suitable for framing, will be sent on request, and free of charge, to winners of prizes or Honorable Mention.

Subject for each contest is ***"Miscellaneous"***; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA, or in books.

Rules

1. This competition is open only to beginners of not more than ***two*** years' practical camera-activity, and whose work submitted here, is ***without any practical help from friend or professional expert.*** A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from 2¼ x 3¼ to and including 3¼ x 5½ inches, and enlargements up to and including 8 x 10 inches.

4. Prints representing ***no more than two different subjects,*** for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. ***Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era awards are announced.*** Prints on rough or linen-finish surface paper are not suitable for reproduction, and should be accompanied by smooth prints on P.O.P., or developing-paper having the same gradations and detail.

5. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.* ***Criticism on request.***

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives *after* he shall have received official recognition.

7. *Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter,* SENT SEPARATELY, *giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks will be sent upon request.* ***Be sure to state on the back of every print for what contest it is intended.***

8. Competitors are requested not to send prints whose mounts exceed about 11 x 14 inches, unless they are packed with *double thicknesses of* ***stiff*** *corrugated board—not the flexible kind, or with thin wood-veneer.* Large packages may be sent by express.

Awards—Beginners' Competition
Closed August 31, 1919

First Prize: Frederick Latzer.
Second Prize: A. R. Hazard.
Honorable Mention: K. Nunome, G. A. Smith, Andrew L. Torino.

The Automobile and the Beginner

THE other day I learned that a well-known camera-club made a six-hundred-and-fifty-mile automobile-trip with a view to obtain new picture-material and to enjoy a week's outing. The results were so satisfactory from a photographic and physical point of view, that the members decided to make these automobile-excursions a permanent activity of the club. I happened to mention this interesting incident to one of our local dealers. To my amazement, he said that he had made several short automobile-trips with customers who were beginners and with whom he could not spend much time during business-hours. The customer possessed the automobile and the dealer the requisite photographic knowledge. By utilizing such an admirable combination, an excellent method was found for the beginner to learn technical photography under highly favorable conditions.

According to the dealer, the customer would act as host for the day and drive his automobile wherever his photographic mentor might suggest. These photo-outings were planned usually for a Sunday or a holiday and, obviously, these trips were exceedingly enjoyable. Often, the customer would include some friends who were amateur photographers and who desired to benefit themselves at the hands of the obliging dealer. One customer, so the dealer said, went so far as to serve an appetizing hot luncheon which had been carefully prepared and kept warm in thermos bottles. The cordial relation thus established resulted in more business for the dealer, greater pleasure in photography for the beginner and a healthy, good time for both.

Further inquiry showed that these photographic outings were carefully planned with regard to route, subject-material and type of photo-equipment to be used. If the customer owned a reflecting-camera and was interested chiefly in speed-pictures, the day was planned to include a base-ball game, yacht-race, airplane-flight, turf-event, athletic meet or other subject that requires the camerist to use a high-speed lens and shutter. Again, if another customer was interested particularly in marine-photography, the day's route was arranged to include points of vantage along the coast, such as Marblehead, Gloucester, Plymouth and even Provincetown. Some customers were equipped for pictorial work; and, to enable them to find the best possible material, the route was laid out through the historic towns of Lexington and Concord and into the open country beyond. In short, no matter what branch of photography the beginner wished to master, there was a trip—all arranged by the dealer—to test his mettle and afford an enjoyable day.

Of course, comparatively few beginners own automobiles; but those that do, should take this account into consideration. Not only will the embryo camerist

"FAR FROM THE MADDING CROWD" FREDERICK LATZER

FIRST PRIZE — BEGINNERS' COMPETITION

learn much of practical value, but he will afford the dealer a well-earned day of diversion in the open air.

It is astonishing to note the number of amateur photographers who fail to use automobile-trips to photographic advantage. I know that, in my own case, I have allowed many exceptional opportunities to slip by when a few moments' thought and preparation would have enabled me to obtain much valuable picture-material. Now, whenever a friend invites me to join him for an automobile-ride, I make sure to take along my vest-pocket camera fitted with an anastigmat lens. With this compact photographic equipment, I am able to photograph virtually anything of pictorial interest that we chance to meet. Subsequent enlarging of the negative enables me to obtain any desired result with regard to composition, size of picture, tonal values and framing-requirements.

Let me give a case in point. This summer I spent a week at Wolfboro, N. H., on Lake Winnepesaukee. Although there was abundant picture-material at hand, I was eager to visit the White Mountains. A careful reading of the railroad time-table showed plainly that it would be impossible to cover the necessary ground short of several days of disconnected travel. As my time was limited, I reluctantly gave up the attempt and decided to make the most of the photographic opportunities around Wolfboro. Then fortune smiled upon me. A party of friends invited me to accompany them on a *one-day* automobile-trip along the most important points of interest in the White Mountains. In short, on that trip of one hundred and sixty-eight miles I visited and photographed Franconia Notch, The Old Man of the Mountain, the famous Profile House, The Flume, Echo Lake, Devil's Pool, Mt. Washington House, Crawford Notch, the Presidential Range of peaks, Chocorua Lake and many less important places. Incidentally, I had many excellent opportunities to make interesting record-photographs of wayside tea-houses, farms, rustic bridges and bits of woodland. There were several amateur photographers in the party and it was my privilege and pleasure to help them obtain excellent results with the photo-equipment they had—this varied from a Brownie to a complicated imported camera with a convertible anastigmat lens. Without an automobile, I doubt that any of us would have visited all of these famous places and had the opportunity to photograph them all on a day that was perfect for picture-making.

If a friend thinks enough of you to invite you to go for an automobile-ride, he should be willing—within reasonable limits—to stop whenever you espy an inviting camera-subject. If you promise him a set of the pictures, when you have finished them, he will be as eager as you are to obtain the best possible subjects. Unfortunately—from the amateur photographer's point of view—the usual automobile-ride consists of an attempt to reach a certain spot in the quickest possible time, and the passenger's recollection of the trip is one long stretch of road with telegraph-poles, farms, automobiles and pedestrians whizzing by at short intervals. Of the landscape he has seen little or nothing; and he has been moving too rapidly to be able to select any picture-material. Hence, when a friend invites you for a ride, be sure to suggest that he drive at moderate speed so that you may have the necessary time to select points of pictorial vantage along the way.

In this, as in all work that counts, it pays to go about it systematically and with a view to make consistent photographic progress on every trip, whether it be for an afternoon or for several days' duration. The practice of making pictures of unfamiliar subjects without much opportunity to make careful preparation, is bound to be of immediate benefit to any beginner who works intelligently—particularly if he has an experienced amateur or professional photographer at hand.

A. H. B.

XUM

ELECTRICITY, BOND AND FREE — A. R. HAZARD

SECOND PRIZE — BEGINNERS' COMPETITION

What Size of Camera Shall I Buy?

THIS is a more or less vital question with every amateur who contemplates the purchase of a camera. There are a number of inviting sizes, each having some advantage over the other. My preference for a universal size for the ordinary amateur is the 3¼ x 4¼. But I have never owned a camera of this size; in fact, have never had anything but a 4 x 5 although I have been an amateur photographer for fifteen years or more. Why do I stick to my 4 x 5, you will ask? My answer is, because it is large enough for most purposes, and small enough, as a general thing, for all others. This seems like something of an anomaly; but it is not necessarily so, as I shall proceed to explain.

If every amateur photographer in the country should send the editor of this journal a sample print of his every-day amateur work, it would—nine times out of ten—have two faults: First, it would be underexposed. But I am not dealing with underexposure. The other fault is more pertinent to this article—the need of trimming. Of course, trimming reduces the size. In many instances, proper trimming will greatly reduce the size. Judging from my own experience as an amateur, more than nine-tenths of my negatives will yield all the "meat" they have on a 3¼ x 4¼ print. Often this is the case on a 2½ x 4¼ print, a very attractive and popular size. Again, oftener than would be thought, all that is desirable in a negative 4 x 5 can be obtained on a little 2¼ x 3¼ print.

At once it may be urged that there is a waste of the film in these cases. There is a loss, it is true; but is it really a waste? Do we lose anything by taking from the negative only that which is good and attractive? Now it cannot be denied that there is in nearly all amateur negatives a surplus over and above that which is most artistic and attractive. Is it not a greater waste to insist on having all this "chaff" transferred to the printing-medium merely to maintain the size of the original negative or avoid (?) waste?

My favorite size for prints in general is the 3¼ x 4¼. I will give some of the reasons why. In the first place, this size is virtually a reduction of the 4 x 5, which is a standard for many purposes itself. Again, this little 3¼ x 4¼ does not look overlarge or coarse. It is easily enclosed in an ordinary envelope for a friend or relative. Again, it is virtually the standard lantern-slide size which is 3¼ x 4, being only a quarter of an inch shorter. The popular 2½ x 4¼ size will usually get all that is desirable out of a 4 x 5 negative and really improve the picture. I like this size very much and for young people, I think it is hard to beat. And, for small prints, we all know that the usual Brownie size is popular. This size, small as it is, will get all the good out of a 4 x 5 negative oftener than one would think. But these are not all the advantages of my 4 x 5. This size lends itself admirably to enlargement and can usually be enlarged to the standard 8 x 10 without much loss of sharpness or other detraction. Commercial prints, as is well known, are often and perhaps usually desired in 4 x 5 sizes or some multiple of this size. Thus it will be seen that my old Eastman No. 4 Bull's Eye Special, fitted with Goerz Dagor lens and Volute shutter, gives me pictures of virtually any size that I require.

But my story is not yet complete. How are these sizes to be obtained from the 4 x 5 negative, I hear some one ask. This is easy enough. It is best done by means of masks, especially where the usual white border is desired. I use a 5 x 7 printing-frame. Then for instance, I take my mask giving 3¼ x 4¼ pictures or prints. The masks I use are made for this size of frame. This enables one to place the film or plate under the mask in the printing-frame and with the thumbs move the negative about until the desired part of the negative shows within the mask. The film or plate is thus held with one hand until the paper is inserted with the other and this is fastened in the frame in the usual way and the exposure made.

Masks of any ordinary size can always be had on the market. But if not, it is no trouble to make them. To do this and get a 3¼ x 4¼ print, from a 4 x 5 negative, for instance, cut a sheet of paper the size of the printing-frame. Then cut a hole in this sheet the exact size of the printing-paper. Next cut a hole in a sheet of paper of the same kind and size one-eighth of an inch all around smaller than the size of the print to be made. Paste this last sheet to the former in such a way that there will be one-eighth of an inch margin on every side which will, of course, give a print one-eighth of an inch smaller on every side than the sheet of paper printed. Other sizes and wider margins when desired can be made in the same way.

W. C. RODGERS.

THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY

The Reduction of Contrast

It is generally believed that the persulphate reducer does not attack the thinner portions of a negative, confining its action to the highlights only; but this is not altogether true, states *The British Journal*. If this were so, it would be possible to leave the image in the solution indefinitely, which we know is not the case. Therefore, it is well to remember that we have in the chromium intensifier a very useful means to improve negatives which have a considerable amount of thin shadow-detail together with dense highlights, which quite preclude the possibility to get a really good print both in gradation and color by any process. Any attempt at reduction will still further weaken the thinner parts, very much if the ferricyanide and hypo method is used, and less if persulphate be employed; with the latter, however, the highlights are reduced in so much greater a proportion that they are printable before the shadow-detail is hopelessly buried, and a much more harmonious result can be obtained. If we adopt the chromium method, we cannot only reduce the highlights, but intensify the shadow-parts, so that the finished negative will closely approximate one which has received full exposure and correct development. The procedure is exactly the same as for intensification, with one exception, that the redevelopment with amidol is not completed, but arrested at any desired stage by rising and transferring to a normal fixing-bath, which dissolves that portion of the dense image which has not been reconverted to the metallic state. Uneven development must be guarded against, and we have found it useful to blot off the surface-moisture from the bleached image so that the developer begins its action evenly all over.

New X-Ray

An X-ray picture made direct on paper without the intermediary of film or plate, and finished in three minutes from the moment of exposure, is made possible by a process invented by Jacques Romano, New York. He says that it depends upon a paper with a specially sensitized film of gelatine blended with a radio-active salt which responds instantly to the Roentgen rays.

Pictures were made of hands, feet and elbows of a skeleton. It was found that the exposure of two seconds was an overexposure in most cases, that thirty seconds sufficed for the development, forty seconds for fixing and ninety seconds for washing. There is, of course, no printing. For drying, a certain time—varying with the humidity of the air—had to be allowed.

Circumstances Alter Cases

A few months ago a writer in *The Amateur Photographer* described his method of cleaning off the films of old negatives by soaking them in cold water and then putting them in hot and scrubbing them. Thereupon another reader described his method, which was more simple and much less trouble. He put his negatives in a solution of washing-soda, and transferred them to an acid-bath, when the film came off at once. The saving in labor seemed to be so great that, having a lot of old negatives to clean, we thought we would try the second method. But, alas! no modification of the soda, acid-baths, and the time of their application were of any avail, and at the finish the work had to be done with the brush and hot water. We do not suggest that the correspondent who recommended the method had not used it and found it to be quite successful; but mention it here to emphasize the fact that treatment which will answer perfectly with one make of plate may be of no use whatever with another. We know that of plates of two excellent makes, when soaked in cold water for a few minutes and then placed in very hot water, one will dissolve right away and the other is unaltered.

Secret Messages on Glass

While cleaning a glass from a printing-frame I was amazed to notice that when I blew my breath on the cold surface, a printed notice appeared. The printing was very distinct and legible but disappeared as the moisture from my breath evaporated. As often as I breathed on the glass the message would reappear, but remained for briefer intervals as the glass became warmer.

Careful examination of the dry glass failed to reveal any trace of printing on its surface, but I remembered that for some time a printed slip had remained under pressure in the printing-frame with its printed side next to the glass. The printing on the glass was found to correspond with that on the paper and was probably due to oily emanations from the printing-ink which made the glass repellent to the "steam" from my breath.

In time of war it is barely possible that so simple a thing as a plain piece of glass might get by with a secret message. The message on the glass is destroyed by a vigorous rubbing.

Winn W. Davidson.

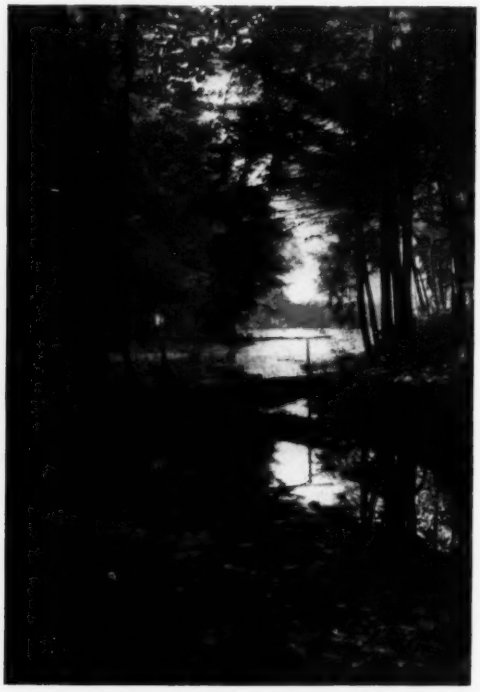
The Latest in Color-Photography

The inventor is Mr. Friese Green, a veritable pioneer in many photographic inventions, notably in the kinematograph: and in this new color-process we have a departure that has much in its favor to appeal to the amateur. It does not attempt the impossible. A good deal of the criticism that has been leveled at methods of color-photography has been concerned with the fidelity of the representation of definite and local colors. With the new process, which is a two-color method, although involving only a single exposure and that one which can be given in a camera of the ordinary kind, the results give a bold approximation of the general color of the subject, and in this respect they are akin to the painter's rather than to the photographer's version. The color, moreover, is perfectly under control, so far as local effects are concerned, and the results are capable of enlargement. In both particulars its appeal should be great, and we look forward with interest to further announcements from the Imperial Dry-Plate Company concerning it.

The Amateur Photographer.

XUM

OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a six-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below.

THE motive is not well executed. Seated figure is well placed, but not propitiously engaged. The part taken by lady standing was not properly planned; and, artistically, this feature of the portrayal is neither sympathetic nor spontaneous. The action of the figures is not sufficiently intense to clinch thematic unity. The vase, a useful accessory, is wrongly placed; and the composition lacks balance. The tonal values are excellent. Solution: Place vase, partly filled with lilies, in front and slightly to right (as viewed) of seated figure, with right hand well around neck of vase and at rest; turn profile the standing figure, hands extended, receiving a blossom from upraised left hand of sitting figure, both concentrating gaze upon lily being profferred. Swing camera to right to obtain space between standing figure and stone-piece in background, which would serve to balance stability of the pyramidal form found in main setting.

E. J. KOESTER.

INSTEAD of the unity so necessary to a successful composition, here we have every important object—one at variance with the other. The figures from their size with respect to the picture, should be, or suggest, the dominant interest. By their positions and the directions they are looking, this interest is at once divided. And the attitude of the standing figure takes us out of the picture entirely. The water-jar at the right continually attracts the eye—it should be made a pleasing accessory or left out altogether. The marble mass in the middle distance, both from its formation and light tone, cannot but detract wherever placed in the otherwise pleasing background. A better placing of the water-garden—possibly by showing more of it—will improve the pictorial balance. Then by more careful handling of the figures that they may suggest

THE PICTURE CRITICIZED THIS MONTH

one thought, a truly beautiful composition could be made.

BERTRAN F. HAWLEY.

"THE LILIES," by Louis S. Clarke, contains good photography but his composition is in error. The edge of the artificial pool leads the eye, very nicely, up from the bottom of the picture to the two figures which, I take it, are the "lilies" (for there are no lilies in the pond—only in the lap of the sitting figure). But the figures are not properly placed. They are artistic in themselves but should be much nearer the center of the picture to make good balance. And the earthen jar seems to be placed where it is shown, in an attempt to overcome the lack of balance. It should be placed in front of the sitting figure and slightly to her left.

THOMAS M. NIAL.

THE poetical picture, "The Lilies," is to be commended rather than criticised. The lighting is good and the photographic work is fine. The background is really a background and makes a beautiful setting for the figures. Some objection may be found with the monument, or whatever it is, behind the standing figure, and I think that it would be better if it were subdued a trifle. The jar is placed about right to balance the figures. The curved line, formed by the coping of the lily-pond, plays a very important part in the composition as it serves to bind the various parts into an harmonious whole. I might suggest that the picture is deserving of a better title, as "The Lilies" play only a minor part in the picture. Altogether, the picture shows careful thought and painstaking work and I congratulate the maker.

JOHN DOVE.

A VERY pretty garden; but the background, with the large urn, and horizontal demarcation of rising ground tend somewhat to distract in a picture of this kind. The standing figure is evidently posing for her picture. I think if this standing figure, in a more active or purposeful pose, were placed on the other side of her companion, and the latter were moved two or three feet to the right, with small jar in foreground eliminated, more unity would be obtained, especially after trimming fully one inch from right. In my judgment the technical work is excellent.

LYNDSEY BOURKE.

AN exquisite subject. Lighting, focusing, timing, perfect; but containing two serious defects in composition. First, the common error of including too much, a lack of concentration of interest, making the picture too "busy." Remove the urn and the grave-stone—the latter obtrusively high in tone, and sentimentally unpleasant. Second, the longest line in the picture, that of the standing figure, is vertical, but the longest length of the picture is horizontal. To correct this, make the picture longest vertically, and include the entire lily-pool in the foreground, making this feature a third of the picture. The foreshortening would be interesting. A glimpse of sky over the tree-tops might accentuate the foliage of the background, though that is very lovely as it is.

ALFRED W. CUTTING.

XUM

OUR ILLUSTRATIONS

WILFRED A. FRENCH

THE camerist who is favored with the opportunity to travel and visit the garden-spots of the world, to enjoy and to photograph them to his heart's content—not only that, but to bring home a comprehensive collection of artistic and carefully made views from distant lands, is to be envied. Such a camerist is Mr. Herbert B. Turner who favored PHOTO-ERA readers with an illustrated photographic visit to Hawaii, in the July issue. Other articles by him on visits to other countries celebrated for their scenic beauty, together with attractive illustrations, are in process of preparation. The subject in the present issue, treated somewhat briefly, is an old town on the Massachusetts coast—Gloucester, known for many years on account of the fishing-industry. Gloucester is likely to be visited next year by tourists who will flock to the Bay State by the thousand, on account of the Pilgrim anniversaries, mentioned in these pages frequently of late.

The cover-design, by Mr. Turner, which also forms the frontispiece, is a group of fishing-boats in Gloucester harbor. It is a typical view which, through the artistic skill of the photographer, has been perpetuated as a stately and impressive composition. Data: July, 2 P.M.; soft light; 5 x 7 Cycle Graphic; Bausch & Lomb Protar; 9⅛-inch focus; stop, F/11; 1/50 second; film; pyro in tank; bromide enlargement.

A striking and familiar view of Gloucester appears on page 228; whereas the view on the opposite page is characteristic of the lobster-industry, at nearby Rockport, and lends itself readily to artistic interpretation. Data: July, 11 A.M.; bright light; same camera and lens as above; stop, F/9; color-screen, K3 (15); 1/5 second; film; pyro in tank; Professional Cyko No. 2.

"The Lobster-Wharf"; page 229; July, 9.30 A.M.; soft light; 5 x 7 Cycle Graphic; Smith Semi-Achromate lens; 12-inch focus; stop, F/8; 1/75 second; film; pyro in tank; Professional Cyko No. 2.

Lovers of scenes of bygone days, away back in the 17th century, will gaze with delight on a picture of the Witch-House, so-called, page 230, a style of domestic architecture of which but a few well-preserved representatives remain. The artist has invested this grateful theme with much pictorial charm, and many are the camerists who, in visiting the historic locality, next year, will be sure to include it in their list of subjects. Data: July, 10 A.M.; soft light; same camera and lens as above; stop, F/9; 1/60 to 1/75 second; film; pyro in tank; Professional Cyko No. 2.

The group of seven typical views of Gloucester and vicinity, page 231, adds greatly to the value of Mr. Turner's story, and should be studied with care by the interested reader. Data: July, 9.30 to 12 noon; good light; upper four pictures, 5 x 7 Cycle Graphic; lower three pictures, 4 x 5 Speed Graphic; upper four, 12-inch Smith Semi-Achromate lens; lower three, 7-inch Bausch & Lomb Tessar 1C; Smith at stop F/9, Tessar at F/11; exposure, Smith lens, 1/50 second; Tessar, 1/40 second; film; pyro in tank; Professional Cyko.

Of course, "Low Tide," page 232, gives much the best view of Gloucester harbor, and shows why it is a favorite theme of the painter and the photo-pictorialist. Mr. Turner's view is particularly happy in its foreground which forms an eminently artistic feature in an harmonious and well-balanced composition. Data: July, 2 P.M.; soft light; 5 x 7 Cycle Graphic; Bausch & Lomb Protar; 9⅛-inch focus; stop, F/11; 1/50 second; film; pyro in tank; Professional Cyko No. 2.

Mr. Davis' paper is of great practical value to students in pictorial composition. Many a successful and pleasing picture, according to a note in the accompanying data, has been made from a part of the original negative. Therefore, a negative, which as a whole does not meet the requirements of a satisfying composition, may contain, somewhere within its limits, the elements of a delightful picture. Judicious trimming or careful masking, after such a gem has been discovered, will produce an astonishingly happy result. In Mr. Davis' case, however, no complicated picture with a hidden pictorial treasure existed; but the possibility to improve an effect marked by dual interest was perceived by the artists, who, instead of discarding the negative, resorted to the drastic method of elimination.

The interesting representations of cobwebs, by Beatrice Bell, possess the added value of artistic composition. It was not enough for her to overcome the physical difficulties of wind and inaccessibility, but she succeeded quite admirably in making these troublesome themes conform to the principles of pictorial composition, for which she deserves great praise. Data:

"A Misty Morning"; page 238; Robbins, Wisconsin; August, 7 A.M.; foggy bright; 4 x 5 Graflex; Zeiss Kodak lens; stop, F/11; 1/10 second; Eastman Speed Film; pyro in developing-machine; enlarged on Artura in Brownie Enlarging Camera; unretouched negative.

"How Wonderful Are Thy Works"; page 239; Robbins, Wisconsin; August, 7.30 A.M.; sun, fog just lifted; same camera and lens; stop, F/11; 1/10 second; same film, developer, paper and enlarging-camera; handwork on negative.

"A Cobweb-Entanglement"; page 240; Lac La Belle, Wisconsin; September, 9 A.M.; foggy bright; same camera and lens; stop, F/11; 1/10 second; same film, developer, paper and enlarging-camera; negative retouched slightly.

"Morning-Jewels"; page 241; Robbins, Wisconsin; August, 7.15 A.M.; sun through fog; same camera and lens; stop, F/16; 1/10 second; same film, developer, paper, and enlarging-camera; considerable retouching on negative.

"From the Spider's Loom"; page 242; Eustis, Florida; January, 7 A.M.; sun through fog; 4 x 5 Cartridge Kodak No. 4; rapid rectilinear lens and portrait-attachment; stop, U. S. 4; color-screen; shortest bulb-exposure; Eastman N. C. film; same developer, paper and enlarging-camera. This was the first cobweb-picture. The color-screen was not used again as the long exposure resulted in a blurred image of the web. The negative was retouched.

It is a source of deep regret that no data of the highly satisfactory photograph of the reproduction of the Mayflower, page 245, were available; for photography of this kind always calls for a degree of technical skill that is acquired only by experience.

Mr. Clifton Church's delightfully sunny landscape, page 247, serves as accompaniment to the essay of Mr. Ward Muir, who is known as an eminent champion and exemplar of straight photography which, regardless of the character of the printing-base, knows not the con-

taminating touch of the dodger, the retoucher, the faker. Yet, the definition of the negative-image may be sharp and clear, or soft and diffused, according to the caprice of the straight photographer, who may employ a sharp-cutting anastigmat or a soft-focus lens. Mr. Church, I understand, is a firm believer in direct photography, but does not confine himself to work of sharp definition. He still clings to the use of an 8 x 10 plate-camera and is not likely to change to a smaller size. Data: Bartlett, New Hampshire; August, 3 P.M.; clear; 8 x 10 Rochester View; Darlot lens; color-screen A; 2 seconds; Seed L. Ortho; pyro; Satista paper.

"Puss" has always played a conspicuous part in the pictorial history of PHOTO-ERA. There have been portraits, notably the one by Paul Wierum, that captured the first prize in the "Domestic Pets" competition, November, 1918, the sitter being Tom Swan, a distinguished member of the feline aristocracy. There have been groups of a sociable character and never any except of a peaceful intent; also groups showing puss as a member of the household and associated with members of the family in a spirit of contentment or jollity. There have been, too, imitations of human genre, although this kind of representation, in the spirit of disapproval, the present Editor ceased to recognize a number of years ago. The present exemplar of feline felicity consented to be photographed about twenty-five years ago, as he lay on a table near the Editor's desk. The Editor remembers that, as junior partner of Benj. French & Co., importers and dealers in Voigtländer lenses and photo-supplies, he was editing the firm's catalog of photographic lenses and, noting the favorable conditions of light and quiet, set up his 6½ x 1½ camera fitted with a No. 2 Euryscope lens, stopped to F/11, and a brief bulb-exposure. Other data cannot be recalled, sorry to say. The picture had been entirely forgotten until it appeared in a recent issue of *Our Dumb Animals*. The Editor at once recognized his old pet, "Toby," and discovered that the gentleman who owned a print had lent it to the Editor of *Our Dumb Animals* with permission to publish it. Hence the picture of "Toby" appears in this issue by courtesy of Mr. Guy Richardson, editor of *Our Dumb Animals*, the official organ of the Massachusetts Society for the Prevention of Cruelty to Animals.

How the vest-pocket camera may be used as a means of relaxation and, at the same time, yield gratifying results, is shown by the experience of Hannah G. Myrick, a professional woman, as described on pages 250–252. In using a small pocket-camera for such a purpose, it is well if the camerist can center his whole attention upon the task, guided by a clear understanding of the manipulation of the equipment, and, if possible, exercise a degree of critical judgment in the selection of suitable subjects. This appears to have been done by the author of the above-mentioned narrative. Here, then, is an object-lesson that should not be without its appeal to every man or woman who is engaged in strenuous mental or physical work, unless, of course, that person prefers some other form of outdoor diversion, such as golf, tennis, etc. All the same, it is safe to say that, so far as actual results are concerned, no outdoor sport, suitable for a woman, can surpass the practice of photography as enjoyed and described by Hannah G. Myrick. Data:

"Custom-House Tower"; page 251; February, 3 P.M.; sunny; 2¼ x 3¼ Icarette camera; Bausch & Lomb Zeiss Tessar 1C; stop, F/4.5; 1/25 second; Autographic film; Rytol, 1 tablet to 12 ounces, developed 32 minutes; Professional Cyko Plat, developed with Ansco M. Q.

"Balloon on Common"; left picture; May, 3 P.M.; sunny; made directly against the light with lens shaded; same camera and lens; stop, F/4.5; Ingento Series A color-screen; 1/100 second; Eastman N. C. film; Rytol; Cyko Professional Plat Ansco M. Q.; soft effect due to using Ingento filter without correcting focus. Center picture; May, 2 P.M.; drizzling rain; same camera and lens, stop, F/4.5; 1/25 second; same film, developer, and paper; developed with Ansco M. Q. plus 4 drops to 5 oz. of potassium bromide. Right picture; May, 2.30 P.M.; sunny; same camera and lens; stop, F/4.5; 1/300 second; same film, developer, paper and development.

"Waterfront-Views"; left picture; April, 3.10 P.M.; same camera and lens; stop, F/4.5; 1/25 second; same film and developer; Azo Buff; Ansco M. Q. Right picture; April, 3.40 P.M.; same camera and lens; stop, F/8; 1/25 second; same film and developer; Azo Hard X grade E; Ansco M. Q.

Snapshots on a somewhat larger scale engage the attention of W. S. Lee. His ultimate result is an enlargement which is marked by a breadth of treatment and a marked individuality quite refreshing in a worker who professes to be unsophisticated in the art of picture-making. If I am not mistaken, there is much to be admired in the artistic spirit manifested in the two impressions by Mr. Lee, and the criticism of his own work does not seem to merit justification. I would challenge his opinion of "Shadowy Pool," page 253, although the picture could be improved by subduing the dark tree-trunk in the upper right corner and the adjacent piece of sky. If the larger tree were to curve outwardly, the artistic effect would be open to question. Data: Michigan; August, 10 A.M.; brilliant sun; 4 x 5 Premo No. 9; Ilex F/7.5 Anastigmat; 6½-inch focus; stop, F/32; Burke & James 3-time color-screen; 8 seconds; Premo film-pack; pyro in tank; P. M. C. No. 8; wildflowers touched in.

The pictorial intent in "Sunny Pastures" is not quite so clear as in the preceding picture. Scattered masses and objects seem to cry for unity or possible elimination; but, the scene certainly offers an opportunity for a successful and pleasing composition. Data: Michigan; August, 2.30 P.M.; bright sun; same camera and lens; stop, F/7.5; Burke & James 3-time color-screen; 2/3 second; same film, developer and paper as above; clouds touched in.

Advanced Workers' Competition

KENNETH D. SMITH seems to have a penchant for photographing outdoor-sports and, it cannot be denied, has been remarkably successful. His entries in several competitions have won the highest honors. Among his notable achievements in his favorite branch of camera-work is the nude male figure, page 259. Here, the tone-values are unusually good; so are the vitality, the action, the pose and lighting of the subject. The stereoscopic effect, the roundness of plasticity of the figure, is superb, and the play of light and shade revealing the muscular action of the back also deserves favorable notice. There is a commendable absence of detracting accessories in this strikingly simple composition that should be appreciated by the student of outdoor genre-photography. The picture is so admirable in conception and treatment, that such minor details as the slightly obscured left arm and the dark reflections indicating the opposite shore of the stream, need not excite the critical propensity of the beholder. Data: Made on an island in the Connecticut River, near Hanover, N.H.; May, 3 P.M.; high light; 3¼ x 5½

(*Continued on page 276*)

ON THE GROUND-GLASS

WILFRED A. FRENCH

Reducer for Embonpoint

A WOMAN with a decided inclination towards *embonpoint* entered a drug-store in Melrose—a suburb of Boston—sometime last summer and asked for a tube of Eastman's Reducer. After looking among his drugs and patent-medicines the clerk remarked: "Sorry, madam; but we don't seem to have it."

Surveying her generous proportions, he asked, "Do you want it to use for the bust or for the figure?"

"For the entire figure," she replied.

"Well," said the obliging clerk, "I have a preparation, put up by ourselves. It has been used with great success. I can recommend it."

"No, thank you," said the stout lady. "I prefer the Eastman Reducer, but don't trouble any more; I can get it at Robey-French's."

"I didn't know that Robey-French carried patent medicines," ventured the clerk.

"Well, they don't. You see *I use the Reducer on negatives.*"

Nature-Photography Under Difficulties

IN the country, Monday, 7.00 A.M. Mrs. Cashum, an ardent camerist, with rapture, to her husband: "Do look at that lovely fog! What lovely atmosphere! What a beautiful picture, and the air is so still!"

Mr. Cashum (with disgust): "Lovely fog, nothing! I wanted to motor back to Boston at 7.30, and I can't start till that fog lifts. I suppose I shall be anchored here for several hours, while my office is waiting for me. Confound that fog!"

Half an hour later. Mrs. Cashum (excitedly): "Don't you *dare* touch that cobweb!"

Mr. Cashum (lowering his cane): "What's all this fuss about? I was only going to examine the thing."

Mrs. Cashum (with much spirit): "I've been waiting all summer long for those lovely cobwebs. They make beautiful photographs. I don't want you to spoil them; that's all."

Waist-Level Photography

Editor of Ground-Glass: Your little pointed story on the "Ground-Glass," of several months ago, about holding the camera waist-high, hit me straight between the eyes. Not only has it cured me of that habit, proving that my pictures do not always show just what my eyes saw, but I now notice how many other misguided snapshooters are doing the same thing. Following your advice, I have adopted a "direct-vision" viewfinder which a camera-acquaintance gave me, recently, and which he used many years ago. It consists of what appears like a concave lens, of rectangular form, set in a metal mounting, attached and hinged to a metal plate secured to the top of the camera and, when not in use, lies down flat, out of the way. It gives a brilliant, upright image and enables the camerist to hold the camera on a level with his eyes and to get the object exactly in the center of the plate or film.

While house-hunting one Sunday, last month, I was looking through an apartment soon to be vacated. The family was at dinner, but the maid showed me around. Before starting on my tour of inspection, the owner of the apartment—a lady with several children—cautioned me to be careful lest I disturb a camera resting on a table in front of the fireplace, as daughter was making a "snapshot" of some things on the mantelpiece. Noticing my look of inquiry, she added that she had been advised to let the camera "act" about fifteen minutes, as the parlor did not get much daylight. True enough, on entering the parlor I noticed the Brownie resting serenely on a low table about three feet from the floor and pointed directly at the fireplace. How "daughter" expected to get a satisfactory picture of the objects on the mantelpiece, was something I could not comprehend; but I hope that some day the truth may dawn upon her, as it has dawned upon me.

A. B. DUNNING.

Unrequited Hospitality

AMONG the members of the P. A. of N. E. who attended the Springfield convention, was the modest dealer of a New England town. At the conclusion of the festivities at Riverside Park, he was about to take the electric back to the city, when a well-known demonstrator and his wife, with whom he had enjoyed the afternoon-sports at the park, were invited to return in the large touring-car of a local dealer. Having seated themselves, the wife of the demonstrator, seeing their Vermont acquaintance near by, said audibly, "Why, there is plenty of room for one more!" But her husband ignored the hint, although, in the circumstances, he could easily have put in a kind word for the visitor from Vermont, who returned to his hotel in a crowded electric car. Then and there he recalled the time when that same demonstrator visited his home-town in Vermont, to sell him a certain line of photo-supplies and was entertained by him at dinner in his home. Thus was genuine hospitality forgotten. It was requited by selfishness or indifference.

Why Prints are Not Returned

PHOTO-ERA has a large collection of prints that are waiting to be returned to their owners. The reasons for this sad state of affairs are as follows:

First, absence of name and address on the prints of sender.

Second, failure of senders to provide any or sufficient postage for their return.

Third, failure to indicate why they were sent, or, rather, no advice has been received by PHOTO-ERA.

Fourth, prints that receive Honorable Mention remain the property of PHOTO-ERA, according to the rules which are stated plainly in every issue, together with conditions under which they may be returned to senders.

If this meets the eye of those who are in the dark regarding the fate of their prints, will they kindly communicate with the Publisher, and they shall be enlightened promptly.

PHOTOGRAPHIC THRIFT

Whoever sends us a letter that we consider of practical photo-saving value, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

Practical Saving-Methods

EDITOR PHOTO-ERA MAGAZINE:

Just one for your Practical Saving-Method column. For those who wish a lens-hood. Long strip of tough paper. I used this brown wrapping, the tough dull-finished kind. Cut a strip long enough to go around lens several times, 8, 9, or 10 times is not too many. My strip is ¾ inches wide for 2½-inch diameter lens. Wrap around lens and glue as you go. Glue well and you will have a nice ring. Make a cornucopia with a good flare. I used an 8 x 10 Azo outside-envelope. It is tough and stiff and was plenty large enough. Had no tough black, so used brown. Glue cornucopia at small end, same need not come to point. Make it just a bit smaller than ring. Cut into small end of cornucopia, being careful so as not to cut in too much. After having rounded small end, make the cuts all around just so ring will fit inside. Now glue these tabs to ring and glue another strip around same as when starting. This will help to hold all together and will look a finished piece of work. Trim to suit. Hood may be cut through—ring and all—same can be carried flat then. To attach, have piece of an old clock-spring, rubber-band or even an old trouser's guard—relic of bicycle days.

On the smaller size lenses, one does not need to be so critical—just the cornucopia cut out, but not glued, left flat, placed in position and held by rubber-band or a piece of watch-spring. Any jeweler would give one for the asking.

C. L. HEATH.

EDITOR PHOTO-ERA MAGAZINE:

In a recent issue of your magazine I find some remarks from one of your thrifty correspondents regarding the economy of buying paper in dozen-lots in the 5 x 7 inch size. A little investigation shows that it is possible to make a great deal bigger saving by carrying the same methods a little farther. In fact, one can obtain for the same money 65% more paper than your correspondent figures.

The price mentioned, 20 cents per dozen for 5 x 7 paper, indicates that the paper is Azo or its equal. Buying it in gross-lots, one can obtain 144 sheets of 4 x 6 Azo for $1.00, which means that for each cent one gets 24 x 144 ÷ 100 or 34.6 square inches. With the other paper a cent buys 35 x 12 ÷ 20 or 21 sq. in. Now 34.6 is 165% of 21.

It is interesting to note how the 4 x 6 paper cuts up for the smallest vest-pocket size, 1⅝ x 2½ in. A strip 2⅜ in. wide is first cut off, lengthwise, and this divided into four pieces each 1½ x 2⅜ in., a trifle small for vest-pocket negatives but generally satisfactory. The remaining strip, 1⅝ x 6 in., makes two full sized pieces. Thus we obtain from the gross 6 x 144 or 864 pieces. A dollar's worth of the 5 x 7 paper produces only 540 pieces—and all of these are undersized.

In connection with this matter of paper, it is astonishing to observe how few amateurs are aware of the economy to be obtained by using such papers as Artura Carbon Black and P. M. C. Bromide, instead of the high-priced "amateur" papers. While the paper itself costs only about ¾ as much as that usually bought, the greatest saving is in time and light, for these papers have marvelous speed as compared with the other.

It is usually poor economy to buy cheap materials where quality is sacrificed. But to my mind the quality of the papers mentioned is superior to that of those which cost more. For negatives of normal or extreme contrast, the rapid papers give a range and beauty of gradation which puts them into a class by themselves. Flat or weak negatives, however, require the usual contrast-grades of amateur-papers.

H. H. BLISS.

EDITOR PHOTO-ERA MAGAZINE:

I turn my leaky plateholders into novel and pretty picture frames. Remove the slide. If holder is scratched, rub it up with a few drops of furniture polish, or, it may be painted any color desired. A 5 x 7 print just fits a 5 x 7 holder. Either print in a border or add a mask to simulate a mat. A postcard in a 5 x 7 holder needs a wider mask to fill the frame, and a bit of paste holds card to center of frame under the mask. Over all, press in a cover-glass, which may be made from an old negative cleaned clear. This conceals and is held in place by the spring. Some holders have a pair of hook-like guards at top to fasten wire or cord to, or wire may be fastened invisibly by inserting Victrola needles inverted in the back of holder.

GRACE C. RUTTER.

EDITOR PHOTO-ERA MAGAZINE:

Paradoxically, the rubber focusing-cloth wears out more quickly if we take pains to fold it up very carefully. Fold it so that the corners do not match evenly and it will last much longer. In this way, the wear is distributed so that the creases do not always come in the same place and quickly produce a row of pin-holes.

Loops of tape sewed to the corners of the cloth allow us to hang it up on a hook, instead of folding it away every time we use it around the home. The loops are also convenient to fasten the cloth over the camera on the tripod. The rubber retains its life longer if kept in a cool, damp place.

WINN W. DAVIDSON.

EDITOR OF THRIFT-DEPARTMENT:

Whenever people in my locality ask me for advice about buying a photographic equipment, my general recommendation is to buy a small camera, preferably a 2¼ x 3¼, as the operating-expense is small and the results are generally sharp. If they wish a larger type, I always suggest the purchase of a piece of ground-glass, and suggest the practice of focusing objects before making an exposure. In my case, the results have proved worth the time spent, and, as a suggestion to the trade, I personally think that a piece of ground-glass should go with every camera that has a lens of over four inches focal length.

HENRY W. PFIZENMAIER.

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ANSWERS TO QUERIES

E. A. C.—**For landscape-work a two- or three-time filter is usually the best,** inasmuch as in clear weather it permits the making of snapshots without the bother of a tripod. Burke & James, Inc., G. Cramer Dry-Plate Company, Eastman Kodak Company, Bausch & Lomb Optical Company, C. P. Goerz American Optical Company and other firms manufacture filters in all speeds and at all prices. We would suggest that, since you have a Goerz V. P. Tenax Camera, with Dagor lens, that you write first to the C. P. Goerz American Optical Company to find out whether or not they are able to supply you with the correct filter. Should they be unable to meet your requirements, it would then be advisable for you to write to the other manufacturers. For portraits the above-mentioned filter would be serviceable, but should you wish greater correction it would be possible for you to use a five- or ten-time filter, provided the subject remained motionless. It is possible for you to obtain plates for your camera that may be used efficiently with any filter. Any standard orthochromatic dry-plate will serve you satisfactorily. From our experience, Cramer, Eastman, Imperial, Wellington, Barnett, Paget, Ilford, Hammer and other makes of dryplates in your size do excellent work.

We would suggest that you write to the G. Cramer Dry-Plate Company and the Hammer Dry-Plate Company, both of St. Louis, Mo., for their booklets dealing with ray-filters. We would also suggest writing to Burke & James, Eastman Kodak Company, Bausch & Lomb Optical Company and other manufacturers for whatever descriptive matter they may have on hand dealing with filters. We believe that after you have carefully read these various booklets, which really are not technical, you will be able to make your own decision to advantage.

S. R.—**There are many excellent and safe gas darkroom-lamps on the market.** Nearly all manufacturers make one or more models, and we would not have the space to mention all of them. However, by calling at one of the dealer's in New York City, we are sure that he will have on hand what you require. The Eastman professional darkroom-lamps are excellent. With regard to your darkroom in the bathroom, we note what you say about the walls and the use of a piece of red glass. We appreciate the fact that it would be impossible for you to darken the high brick-wall outside of your bathroom-window. With regard to the use of red glass to avoid the light coming from this wall, we beg to say that you should be very careful to buy copper-flashed red glass; otherwise, you will not have a light that is absolutely safe. The smaller the area of the glass, the better it will be, and the less chance for trouble. We take the opportunity of suggesting that a developing-tank would do away with all of your difficulties, since by the use of a changing-bag you could load the tank and then do all the work in broad daylight, with the windows open, and in comfort. With regard to the side from which the light should fall on the subject, there is no definite rule. The entire matter rests with the subject at hand and the conditions under which the picture is to be made. We would refer you to Paul Lewis Anderson's "Pictorial Landscape-Photography," mentioned in PHOTO-ERA, and to Poore's excellent book "Pictorial Composition and the Critical Judgment of Pictures," both of which would be of assistance to you. With regard to an orthochromatic plate without a filter, for portraiture, we believe that for most subjects it would be preferable to the same plate used with a filter.

J. M. B.—**With regard to obtaining a soft-focus effect from a sharp negative by means of diffusion in the enlarging,** we would say that although diffusion may be obtained by manipulating the lens in the enlarging-camera, this diffusion is not equivalent to the same diffusion obtained from a negative made from a soft-focus lens. Also, it is possible to take an anastigmat lens and by careful manipulation to obtain more or less diffusion. This, however, requires extraordinary skill, and cannot be done in every case, since it is a well-known fact that every anastigmat lens, no matter what its position with regard to the plate, will produce some one plane sharply. There are two ways that we believe might be of assistance to you to obtain the desired effect. One is to obtain a soft-focus lens and make your negatives with it. The other is to make your negatives with an ordinary lens and enlarge them through a soft-focus lens on an enlarging-camera. Both methods will obtain diffusion.

L. J. E.—**Long-focus lenses generally improve the perspective;** at the same time, they narrow the angle of the picture to such an extent that the field of view is reduced. The entire matter depends upon the work in hand. For pictorial photography, it is better to have a lens of fairly long focus than one that is too short.

O. C. H.—**A 4-inch lens on a 2½ x 3½ plate is virtually equal to an 8-inch lens on 5 x 7 plate.** In both cases it is the angle included by the lens which is the deciding factor. The size of the plate has nothing to do with it. Should you change the focal length of the lens in question from a 4-inch to a 6-inch and from an 8-inch to a 9-inch the matter would still remain relatively the same.

W. B. C.—**If there is depth of focus in a small negative, it will appear in the enlargement;** if in the small negative there is no depth of focus, no amount of enlarging will put it there. It must be remembered that enlarging cannot put into a picture that which is not in the negative. It is advisable to obtain depth of focus at the time the picture is made.

W. G. K.—**The stains that appear on your prints,** when fixed in a Chrome Alum fixing-bath containing Sodium Sulphite and Sulphuric Acid, are undoubtedly caused by sulphurization. In other words, the bath has acted as a toning-bath and the prints have been toned sepia. We can see no reason why the prints will not be permanent, provided that they have been thoroughly washed. However, we cannot quite understand that some amateurs persist in using formulas that are not recommended by the manufacturers, and, as you, of course, know, Eastman Kodak Company maintains a large experimental laboratory, and formulas they publish and recommend are the result of a great deal of study. For this reason we would suggest that you follow the manipulation described in the instruction sheet which you undoubtedly receive with the paper that you use.

EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication

George Eastman, Benefactor

When the term "benefactor" is used loosely—as it has been of late—it is refreshing to find a man whose benefactions do not consist of fine phrases and nebulous theories, but of genuine practical deeds, born of purely generous motives. George Eastman, of the Eastman Kodak Company of Rochester, N.Y., is the mysterious "Mr. Smith," who has already given the Massachusetts Institute of Technology $7,000,000 and promised it $4,000,000 more on condition that a like amount be raised from other sources before January 1. That is the substance of rumors which are current in Rochester, and which no amount of denial serves to set at rest. Mr. Eastman himself is non-communicative and refers all inquirers to Dr. Richard C. Maclaurin, president of the Institution. Mr. Eastman's refusal to say either "yes" or "no" to the question whether he is "Mr. Smith," is taken in Rochester to be as good as an affirmative answer. Those who know Mr. Eastman, and are acquainted with his ways, are positive that if he were not "Mr. Smith" he would say so in emphatic language. He is not the sort of man to let false impressions about himself go unchallenged.

Mr. Eastman has always been a liberal giver to worthy causes and a stanch friend of higher education. Only a few months ago he made a gift of several millions to the University of Rochester. The identity of the mysterious "Mr. Smith" has long been a subject of discussion in Boston and in those cities in which Tech men are to be found. "Mr. Smith" first came to the public notice when the Institute's new buildings were being erected. At that time, it was announced that he had contributed millions to help provide a new home for Technology. Only recently, when the Institute's campaign for a new endowment fund was begun, President Maclaurin stated that "Mr. Smith" had agreed to give $4,000,000 provided Tech procured an identical amount from other sources. Dr. Maclaurin further promised to divulge the donor's identity when the whole fund had been completed and the stipulated conditions had been met. Happily, or otherwise, the identity of the modest benefactor was discovered sooner than was expected.

George W. French Wins Signal Successes

We are, indeed, happy to call attention to the remarkable success achieved by our good friend, George W. French, a consistent Photo-Era prize-winner. It seems that the *Newark Sunday Call* of Newark, N.J., instituted an eight-week photographic contest, one prize of ten dollars and two of five dollars to be awarded each week. At the close of the contest, all pictures reproduced were to be judged again and a Grand Prize of fifty dollars awarded to the best one. Mr. French won three first prizes, four Honorable Mentions and the Grand Prize. The winning picture was "Bending to the Task," which won first prize in the Photo-Era Indoor-Genre Competition of last year, and is used on page 262 as an excellent example of indoor-genre. In concluding his account of his good fortune, Mr. French says, "for all of which I feel quite indebted to you for past advice and help."

New York State College of Forestry

A new requirement at the New York State College of Forestry, Syracuse, N.Y., stipulates that every student and member of the faculty shall file with the registrar of the college a photograph of himself to be included in the official record of the individual. Moreover, a photographic department has been added to provide the public with pictures which show the work being done by the college and to help educate the public visually as to what can be done to help beautify the state by improving its tree-growth. Many other colleges and institutions of learning would be benefited greatly by a well-equipped and practically administered photographic department.

Metropolitan Museum of Art

Readers of Photo-Era will be glad to know that The Metropolitan Museum of Art, Fifth Avenue, New York City, makes and sells reproductions of all objects in its collections. These reproductions include photographs, postcards, halftones and lantern-slides. A price-list and further information may be obtained from the secretary, Henry W. Kent, to whom orders may be sent.

Meeting of O. C. Reiter and Louis Fleckenstein

Perhaps, no two men have done more to advance pictorial photography in America than O. C. Reiter, president of the Pittsburgh Salon and Camera Club, and Louis Fleckenstein, director of the International Salon and of the Los Angeles Camera Pictorialists. Recently, these men met for the first time at the home of Mr. Fleckenstein, in Los Angeles, and the meeting cannot fail to become a memorable one in the annals of pictorial photography.

Awards at Sacramento State Fair

At the recent Sacramento State Fair, California, nine medals were awarded, five of them going to members of the Los Angeles Camera Pictorialists. The awards were as follows: First prize, gold medal, portraiture, to Louis Fleckenstein; second prize, silver medal, portraiture, Margaret Mather; third prize, portraiture, bronze medal, to E. H. Weston; second prize, silver medal, miscellaneous, to Ford Sterling; second prize, silver medal, study, to Oscar Maurer; second prize, landscapes, silver medal, to I. C. Marven; and second prize, marines, silver medal, to E. M. Pratt. Seven other awards went to Los Angeles workers—altogether an excellent showing.

The Chicago Camera Club

During October the Chicago Camera Club, 31 West Lake Street, Chicago, arranged an excellent program of lectures, criticisms of prints and lantern-slides and exhibitions. October 1 was Ladies' Night, and a delightful lecture of American historical interest, "Camera-Days Down East," was given by Mr. and Mrs. W. A. Rowley. On October 2 two reels of official French war-pictures were shown, followed by discus-

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sion of prints of the September exhibition. October 15 was devoted to studio-practice with a model. At the October 22 meeting the prints submitted by the Print-League were considered. October 8 to 22, the prints by C. N. Bowen and B. B. Conheim were on exhibition and those of A. L. Estep and B. J. Morris, October 15 to 29. Although the membership of necessity is limited, the meetings and exhibitions are open to interested amateurs who are cordially invited to attend.

The Columbia Photographic Society

An announcement received from the Columbia Photographic Society, 2526 North Broad Street, Philadelphia, mentions the many pleasant and profitable activities of the society. One in particular is somewhat of an innovation, viz., the six-hundred-and-fifty-mile automobile-outing of July 20, when the members devoted virtually a week to photographing the many beautiful subjects *en route*. Other camera-clubs should arrange similar outings, thereby gaining in health and much valuable practical photographic experience.

Elysian Camera Club

This season's educational demonstrations of the Elysian Camera Club, 307 Washington Street, Hoboken, New Jersey, were inaugurated by a lecture on making lantern-slides. This was followed, on October 3, by a talk, "Coloring Lantern-Slides," given by Mr. Richard Beyer. Other educational features, free to amateurs and others interested, are planned for the season.

A Daring Photographic Exploit

According to a despatch emanating apparently from Amerongen, the present place of residence of William of Hohenzollern, two Dutch photographers carried out successfully an extraordinary attempt to obtain a photograph of the former German emperor on October 4, by using a wagon piled high with hay. They were concealed with their cameras within the load of hay and were driven past the castle-wall, behind which William II could be seen. While pretending to arrange the sliding load of hay, the photographers succeeded in training their cameras ,and made successful exposures.

Our Illustrations

(*Continued from page 271*)

Compact Graflex, fitted with 7¼-inch Ic Tessar; stop, F/8; 1/40 second; Wellington Anti-Screen (backed) plate; pyro in tank; 7 x 9 enlargement on Contrast Enlargement Cyko Plat.

Those who have watched the progress of George W. French, as shown in our competitions, cannot but be impressed by his versatility in the choice of camera-subjects. Tremendously interested in human life, he has a pronounced predilection for pictures that portray human activity, such as genres or landscape with figures. His eminently successful indoor genre, "Bending to the Task," page 262, which captured the first prize in the December, 1918, competition, exemplifies artistic ability of a high order. In the present instance, page 260, Mr. French appeals to Photo-Era readers through a landscape that possesses true pictorial quality. Its beauty and poetic charm are undeniable, and as an artistic composition, of almost spontaneous origin, it fills the eye, and well befits the primary title, "Where the Lake smiles back at the mountain." Data: July, 3 P.M.; slightly hazy light; 5 x 7 Tele-Photo Cycle Poco; 13-inch B. & L. rap. rect. lens; stop, U. S. 16; 3-time color-screen; 6 seconds; Standard Orthonon; pyro; contact print Azo Hard.

Where the preceding picture had imaginative quality, the present, by Austin P. Wade, appeals through its material interest. The figures are placed admirably against an appropriate background. The whole arrangement evinces excellent judgment in spacing, and the group of bathers appears unaware of the artist's presence. The tone-values and the general perspective are also highly creditable. Data: July; bright sunlight; R. R. lens; stop, U. S. 8; 1/100 second; tank-developed; enlarged from part of negative; print on Argo Enlarging C. C. L.

"Bending to the Task," used as an illustration of the subject, "Indoor-Genres," page 262, is one of the best genres sent to this class of competitions for many years. The picture is an inspiration in motive, design and execution. In action, chiaroscuro and treatment Mr. French's picture suggests the work of Jean François Millet! Data: August, 1 P.M.; strong light; camera, Ansco V. P. 3; size, 2¼ x 3¼; lens, Ansco Anastigmat; 4-inch focus; stop, F/6.3; exposure 7 seconds and flashlight; Eastman film; pyro developer; enlarged on Royal bromide.

Beginners' Competition

As has been demonstrated many times, in this department, the winner of the first prize displays an artistic perception and means of expression worthy an experienced pictorialist. So in the case of Frederick Latzer, whose first-prize picture is reproduced on page 265. It shows a landscape of impressive dignity, well spaced and rich in tone, in which the chief interest occupies an intelligently selected spot. The pictorial design is plain, harmonious and unconventional and, all in all, is highly complimentary to the skill of a very promising artist. Data: June, 1919; 11 A.M.; hazy sunlight; No. 1 Kodak Special (2¼ x 3¼); 4¼-inch Cooke-Kodak 6.3; stop, F/11; 1/25 second; Eastman roll-film; pyro; bromide enlargement; locality, Hunter, N.Y.

It is many years since a photograph of lightning has appeared in this magazine, because little difficulty is encountered in the making of it. Nevertheless, it may be interesting for many to know how such a picture is produced. Mr. Hazard has succeeded in imparting a considerable degree of pictorial interest to his effort, and the result is a picture quite worth while. Data: August 31, 1919; 10.30 P.M.; portrait-film; pyro in tank, 66 degrees, 19 minutes; 6-inch Wollensak Velostigmat No. 2, series 2; stop, F/8; time-exposure; print, Contact, on Azo Hard Matte, M. Q.

Our Contributing Critics

The picture offered this month to our contributing critics for consideration is, "Out Into the St. Lawrence" by Alric R. Herriman. "I love this little scene," says Mr. Herriman, "and would like to get a better photograph of it. It is at the mouth of a small creek flowing into the St. Lawrence river and the viewpoint is in dense shade." We are sure that the kindly constructive criticism of our contributing critics will prove to be of value. Data: August, 2 P.M.; sunlight obscured by smoke from forest fires; Press Graflex; Tessar Ic lens; stop, F/32; 6 seconds; Premo film-pack; Azo E. Hard; the printing was held back on all except the center of the negative.

LONDON LETTER

CARINE AND WILL CADBY

The great social event of the Photographer's Year draws near, the opening of the Photographic Salon. Next Thursday (September 11) will see a gathering of press-folk in the Gallery; on Friday the exhibitors entertain their friends at the Private View, and on Saturday, September 13, the general public will come in to see what is really a representative exhibition of some of the best of photography.

It is Mr. Mortimer who is the *Deus ex Machina* of the Photographic Salon. As its secretary, he is responsible for its policy and has kept it alive during these difficult war-years. Under his management, the exhibition has not only become self-supporting, but a fund has been accumulated for future activities. This is truly a very commendable achievement.

We were spending yesterday with Mr. Reginald Craigie, the former secretary, who in a large measure guided the Salon in those strenuous years when it first made for itself a world-wide reputation. His administrative work did much to maintain the prestige of the exhibition, but he also had the art that kept its members in harmony with each other. It was probably his gift for inspiring enthusiasm in the cause of the Photographic Salon, and a sense of humor, that preserved him from taking any differences of opinion very seriously, which helped him to steer his ship for so many years clear of the shoals of jealousy, apathy and discontent.

Mr. Craigie has been dead to the photographic world for the last five years, having been engaged on the most strenuous war-work, but we are hoping that he will soon make his reappearance, for he is as enthusiastic as ever, and has already paid a visit to the Selecting Committee at the Salon, and has assured us that this year there will be a finer show than ever. The judging has been more severe, for conditions are already becoming easier, and the first Peace Salon promises to be a record one.

There is much activity just now among the second-hand photographic dealers. They realize that photography as a hobby has never been so popular as to-day, and the ranks of professionals and pressmen have never been so full as now. As a natural result of the increased number of workers, but even more through the cessation of manufacture during the war, there is an unexampled scarcity of second-hand apparatus, and new goods are not yet on the market in any quantity. Consequently, it is the day of the second-hand dealer, and cameras of repute are changing hands at enormously high prices. The position seems much the same as in the motor-industry, where individuals are selling their cars bought before the war at double their original price. But time, which means output, presumably will bring about a reasonable balance in the near future, and then—although prices will not drop to pre-war figures—people who have purchased at present-day fancy prices will find their possessions sadly depreciated.

A certain Dr. Erwin Quedenfeldt, of the Rhine Photographic Study and Research Institute, Düsseldorf, has been circularizing photographers in this country with a view to induce them to subscribe to a portfolio of the very latest German photographic pictures. Dr. Quedenfeldt complains that most present-day work is entirely uninfluenced by the war. Photographers still represent only the scenes and characteristics that are as they were before 1914. This, as he calls it, "crying-to-heaven stagnation," and "soul-destroying naturalismus," must be swept aside in favor of the representation of the world penetrated by the revolutionary spirit of the new era. And this, he contends, his new portfolio of prints contains, but it is not an encouraging sign that the only reproduction on the circular is from a drawing, and not from one of the new-time pictures. The price of this epoch-making collection is 45 marks, which seems quite reasonable considering the depreciation of German currency, and also when one realizes the importance of this "Erste Dokument neuen Gestaltens."

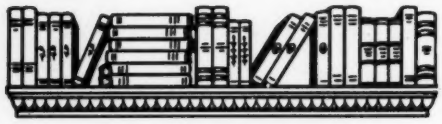
We have always been admirers of the German School of Photography, and no doubt Dr. Quedenfeldt's portfolio will contain examples of up-to-date German photographic expression; but, somehow,—although peace has been declared, and the ordinary post is beginning to work between the two countries, and as these circulars prove,—one feels that Englishmen are not yet in the mood to subscribe to German publications, however advanced and intelligent they may be.

The circular is entirely in what we should describe as "high-flown" German. The author refers to this new photography as "Lichtzeichnungen," which seems to us quite a charming expression. Here, with our usual slow minds and methods we have only now become accustomed to "sun-pictures," but cannot help thinking that, for certain styles of photography, "light-drawings" is even better.

The historic scenes at Paris and Versailles throughout the month when the Peace-Treaty was being discussed, dictated, and signed, were recorded by the British Official Photographer to the Conference, M. Victor Console. This work has now been issued in the shape of an album of beautifully reproduced photographs which forms a graphic record of the fateful proceedings. Very few of the prints are set pieces, and herein lies their interest, for they represent such exciting episodes as when Signor Orlando left Paris after—the Fiume deadlock. Then there are curious and strangely picturesque figures of Arabs, Greeks, Turks, Sinn Feiners and even Chinese reformers, all represented and striving for recognition, at the time that geography went into the melting-pot.

We have lately seen a photograph of a kind that will soon be popular. It was of the Kodak Works, at Harrow, Middlesex, made from a low-flying airplane. It does not represent a map or top-view of the buildings, for they are in good perspective; but it is obviously made from above—from vantage-ground, so to speak—and is exactly the position one so often wants when making a near bird's-eye view of a subject. Even the word "Kodak" is clearly defined on the big chimney. Presumably, the time is not far off when we shall hire a plane purely for photographic purposes; but the pilot will have to be clever in placing us in a proper position for making the exposure.

Mr. Ward Muir's Exhibition at the Camera Club, of which we gave notice some months back, is now open. It is called "The Fact of Beauty," and is a show of entirely straight photographs, which we intend to discuss in our next letter.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

THE FINE ART OF PHOTOGRAPHY. By Paul L. Anderson. 311 pages. 24 illustrations from original photographs and 17 diagrams. Cloth. Price, $3.00 net. Philadelphia and London: J. B. Lippincott Company.

As one begins to read a page in Mr. Anderson's book, he is impelled to continue by reason of the earnestness, conviction and sincerity of the author, and the clear and logical way he treats his subject. He is a firm believer in the broad, elastic application of approved technical methods to obtain a truly artistic result, while his favorite printing-mediums are oil and bromoil. Mr. Anderson's object is to present the æsthetic side of photography as a fine art, and how the ambitious practitioner should proceed to produce results that may be accepted as works of art. He leads the reader into the realm of lofty ideals and explains to him, in terms that are delightfully clear and alluring, the principles of artistic beauty as expressed by line, mass, unity, balance, tonal value, suggestion and mystery. Each component is illustrated by word and picture, and his illustrations are masterpieces from the portfolios of Macnaughtan, Sümmons, White, Käsebier, Wentworth, Brigman, Struss and other eminent workers. In appearing before the public as an advocate of the practice of photography as a fine art, Mr. Anderson has mounted the stage of expressive eloquence and delivered an essay of rare power, helpfulness and charm, which may truly be regarded as a classic in photographic literature. The contents consists of twelve chapters devoted to Introduction—Composition—Values—Suggestion and Mystery—Landscape-Work—Winter-Work; Landscape with Figures; Figures in Landscape; Genre; Illustration—Architectural Work—Marine-Work—Motion-Picture Work—Portraiture—The Philosophy of the Hand-Camera—Conclusion.

The text is enlarged by references to the well-known, standard work on pictorial composition by Henry R. Poore and a description by Bertrand H. Wentworth—the brilliant marine-photographer—of his manner of approaching a pictorial subject. The book is a valuable acquisition to the library of every pictorial worker eager to understand and appreciate the performances of acknowledged masters in photographic art and to develop his own artistic talents along advanced and fundamentally artistic lines.

THE CAREER OF LEONARD WOOD—ADMINISTRATOR, ORGANIZER, PATRIOT, STATESMAN, SOLDIER, AMERICAN. By Joseph Hamblen Sears. Illustrated. $1.50 net. New York and London: D. Appleton and Co.

The position held by a public official, civil or military, is generally the standard by which his capacity is gauged. Such a conclusion is correct, provided that the incumbent has arrived at his high position by reason of meritorious achievement—and as the result of recognition of eminent public service. A grateful people may yet demand still higher reward, despite well-organized efforts to obscure his honorable, distinguished and patriotic record, and select him as their leader—one worthy to fill the highest federal office with the unselfish devotion of a Cleveland or a Roosevelt.

The events of the Great War have but temporarily dimmed the long and brilliant career of Leonard Wood, which, in truth, forms a conspicuous part of American history; and among the Americans, in whatever walk of life, who are held up to our young men as examples worthy of emulation, the modest and brilliantly accomplished Leonard Wood occupies a prominent place. And it should be the duty of every American, young or old, to become familiar with the career of a man who made his mark as administrator, organizer, patriot, statesman, soldier and diplomat. For instance, his seemingly hopeless task of reorganizing the unsettled affairs of Cuba, after four centuries of tyranny and misrule—a problem that required the utmost skill, tact, foresight and courage, and, in accomplishing which, Leonard Wood won the respect, admiration and gratitude of the people of Cuba—historians have pronounced an accomplishment of the highest order. For this remarkable achievement, the French government conferred upon him the decoration of Grand Officer of the Legion of Honor. This act, on the part of the French, was absolutely spontaneous, and was not the result of suggestion or of political expediency; for at that time France did not find it necessary to propitiate the United States. Hence, this honor, in the case of Major-General Wood, has the greater significance and value. In presenting to the public his admirable biographical sketch of Leonard Wood, the author, Joseph H. Sears, has performed a notable public service, and his book is sure of a general and appreciative reading at a time when, as never before, the country is in need of a leader, tried and true—an AMERICAN.

G. R. Ballance Returns to Menton

THE well-known, pictorial photographer, G. R. Ballance, whose work is familiar to PHOTO-ERA readers—and prints of which are now available according to advertisement in this issue—states that he has moved his residence, together with his business, from London to Menton, France. While in London, during the war, American soldiers recuperating in the French Maritime Provinces were enthusiastic about his work, and purchased thousands of his prints. Mr. Ballance, who has spent about ten years in Switzerland and the Riviera, was glad to get away from London, where he was engaged in war-work. He writes:

"Now, I am free again and business is very promising. It will be a joy to see an old olive-tree again and bask like a lizard in the sun, while waiting for a cloud to form at the right spot or for a shadow to move along, to see the sun come up in a blaze of color from the still or tumbling sea, and get a thrill at the red and orange painted houses instead of the dingy vista of chimney-pots, bricks and mortar, covered low down with a canopy of drizzling, scudding mists."

Anyone who has visited the Riviera, with its matchless beauty of color, will envy Mr. Ballance in his re-established place of activity.

Not to be Trusted

Clerk—"We can't pay you the twenty-five dollars on this money order until you are identified."

Man—"That's tough. There's only one man in town who can identify me, that's Jim Crane, the Kodak-finisher, and I owe him twenty."—*Bindery Talk.*

WITH THE TRADE

Johnston's Snow White Fluid

THE vacation-season is now past and amateurs are making plans to collect their snapshots into albums for permanent keeping. No photographic record of vacation-days is complete without written data below each print. J. W. Johnston, New Arts Building, Rochester, New York, manufactures a fluid, known as Snow-white, that will not rub off, powder nor decay, and may be used easily with an ordinary pen. Amateur and professional photographers are urged to try this excellent product which has our hearty endorsement.

Peerless Japanese Watercolors

THERE is no more interesting or profitable activity for the amateur photographer than to color his larger-sized snapshots and enlargements. The approach of the holiday-season suggests the advisability of preparing appropriate Christmas-gifts. Is there anything more welcome than a well-colored and suitably framed picture—every bit of it, excepting the frame, the personal work of the donor? The Japanese Water Color Company, Rochester, New York, has issued an attractive booklet that shows the way to obtain excellent results at a minimum outlay of time and effort. The manufacturers will be pleased to send the booklet and any other information on request.

A New David Stern Catalog

THE David Stern Company, 1114 Davsco Bldg., Chicago, has issued a new catalog, which lists all standard cameras, lenses, Kodaks and supplies, at money-saving prices; also several new lines, among them jewelry, talking-machines, automobile-accessories, books, etc., on which the customer can save money, or the money he has paid will be returned to him. The firm states that all orders will be shipped within twenty-four hours after being received, by a specially arranged schedule; that their stocks are complete, and that they carry one of the largest supplies of photographic goods in the country. Every camera-user should have a copy of this catalog.

New York Institute of Photography

THE New York Institute of Photography announces the opening of a branch school at 104 Flatbush Avenue, Brooklyn, New York, situated opposite the Long Island Railroad station. Their registrar, K. A. McEroy, reports that many new students enroll because of the personal recommendation of successful graduates. Complete and thorough courses are now given in motion-picture, commercial and portrait-photography.

Glazing Prints

AMATEUR photography has come into its own again this season, and our dealer-friends should be overwhelmed with orders for printing. As glossy-surface paper is the kind most used for small work, we think that a few remarks on squeegeeing gelatine-papers may be useful.

The finest gloss is produced by using glass as a support, although pulp-boards and ferrotype plates give quite good results. The old way of cleaning the support, applying French chalk, and polishing it off again entailed considerable labor and, sometimes, resulted in prints being spoiled by sticking. There are other methods such as applying wax or petrol mixtures; but none is so successful or easy to work as the liquid glazing-solution used so largely by postcard-publishers, etc. This is extremely simple to use and absolutely certain in action.

A little of the solution is rubbed on the previously washed support, the wet prints are then placed face down on the support, and squeegeed. When a large number of small prints have to be glazed, it is necessary to use a piece of sheet rubber-cloth a trifle larger than the support. After the wet prints are put in position on the support, the cloth is wetted, placed over the prints, and a flat squeegee applied, rubbing lightly at first to remove superfluous water, and finally giving two firm strokes commencing at the center of the cloth. The cloth is then gently peeled off, the support stood on end to drain, and then placed in a current of air to dry. When *quite* dry, the prints can be easily peeled off and placed under a weight to keep them flat.

The only failures likely to be met with are (*a*) air-bells due to insufficient pressure in squeegeeing, and (*b*) particles of dirt or foreign matter in the water that is used for cleaning the glass. The latter defect can be avoided by passing the squeegee over the washed glass before applying the glazing-solution.

Rajar Limited.

Photography to the Rescue!

OWING to conditions over which the large publishers in New York had no control, the regular editions of current magazines were curtailed and in some cases were not issued at all. *The Literary Digest* was the first to meet the problem successfully. The material for its issue of October 18, 1919, was first carefully typewritten and then arranged in page-form. Next, each one of the eighty pages was photographed and prints were made from the resulting negatives. The prints, in turn, were halftones and from each halftone as many electrotypes were made as the edition required and thus, by photography, all typesetting was eliminated. Incidentally, this same method was used to produce the popular American Handy Volume Edition of the Encyclopædia Britannica.

When Cameras Need Mending

Photo-salesman (confidentially to the manager): "There's a man to see you, sir. I think he's a mendicant."

Manager (of limited vocabulary): "Tell him we have no cameras to mend."

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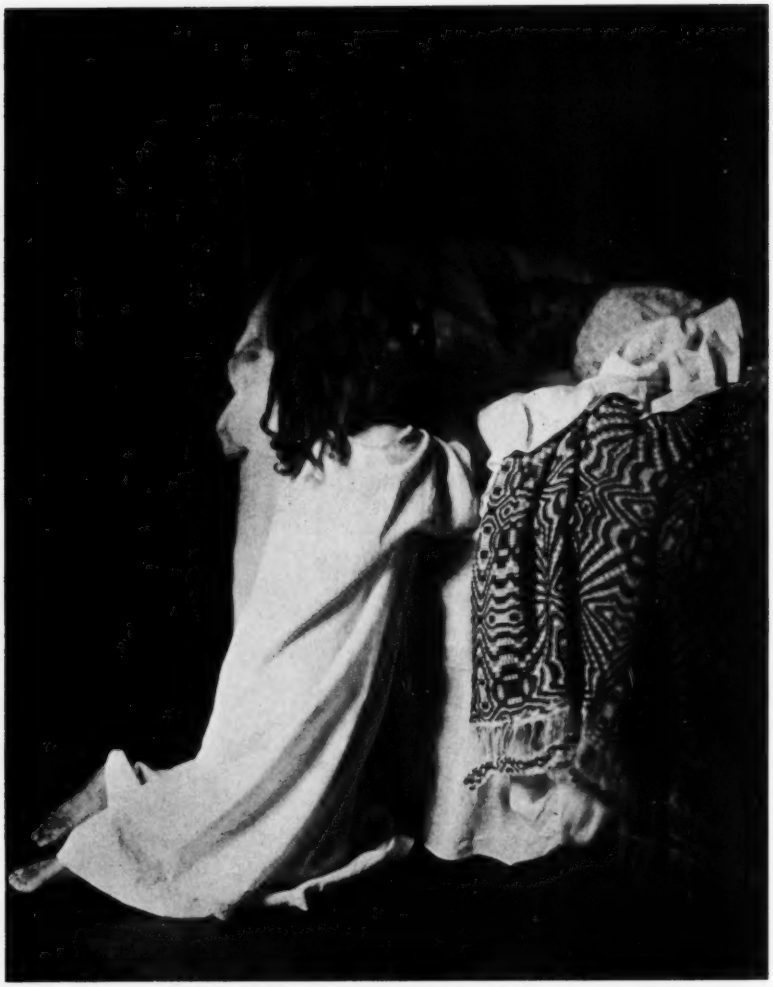

HER CHRISTMAS-PRAYER
KATHERINE BINGHAM

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